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# REPORTS

FROM

# COMMITTEES:

*SEVEN VOLUMES.*

—(7.)—

STATIONERY OFFICE (PRINTING CONTRACTS);
STEAM ENGINES (PERSONS IN CHARGE) BILL;
SUMMARY JURISDICTION (MARRIED WOMEN) BILL;
TELEPHONE SERVICE; TRUSTS ADMINISTRATION;
WEIGHTS AND MEASURES.

SESSION 1.—5 *February* 1895——6 *July* 1895.
SESSION 2.—12 *August* 1895——5 *September* 1895.

## VOL. XIII.

1895.

# REPORTS FROM COMMITTEES:

1895.

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*SEVEN VOLUMES:—CONTENTS OF THE*

SEVENTH VOLUME.

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N.B.—*THE* Figures *at the* beginning of the line, *correspond with the* N° *at the foot of each* Report; *and the* Figures *at the* end of the line, *refer to the* MS. Paging *of the Volumes arranged for The House of Commons.*

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362. Report from the Select Committee on Stationery Office (Printing Contracts); with the Proceedings of the Committee. p. 1

STEAM ENGINES (PERSONS IN CHARGE) BILL:

274. Special Report and Report from the Select Committee on Steam Engines (Persons in Charge) Bill; with the Proceedings of the Committee. 7

SUMMARY JURISDICTION (MARRIED WOMEN) BILL:

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# REPORT

FROM THE

## SELECT COMMITTEE

ON

# STATIONERY OFFICE (Printing Contracts);

WITH THE

## PROCEEDINGS OF THE COMMITTEE.

*Ordered, by* The House of Commons, *to be Printed,*
2 *July* 1895.

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90, WEST NILE STREET, GLASGOW; or
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362.

## Stationery Office (Printing Contracts).

*Ordered*,—[*Monday*, 13*th May* 1895] :—That a Select Committee be appointed to inquire whether the present system of issuing invitations for tenders and of making Contracts for Government Printing and Binding sufficiently secures compliance with the terms and spirit of the Resolution of the House of Commons on the 13th day of February 1891, and whether any, and, if so, what, improvements of the system are called for.

Committee nominated—[*Wednesday*, 19*th June* 1895]—of :—

Mr. Michael Austin.
Mr. Buchanan.
Mr. Burns.
Mr. Courtney.
Mr. Laurence Hardy.
Mr. Henniker Heaton.
Sir John Hibbert.
Mr. Lough.
Sir Herbert Maxwell.
Captain Norton.
Mr. Stephens.
Colonel Howard Vincent.
Mr. Woods.

That the Committee have power to send for Persons, Papers, and Records.

That Five be the Quorum of the Committee.

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# REPORT.

YOUR COMMITTEE have met to consider the matters to them referred, but seeing that it is not possible for them to commence the Inquiry at this period of the Session, they recommend that the Ten years' existing Contracts be not renewed till the Committee Report, and that the Committee be re-appointed next Parliament with fuller powers to continue the Inquiry.

*July* 1895.

# PROCEEDINGS OF THE COMMITTEE.

*Friday*, 21*st June* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Mr. Michael Austin. | Colonel Howard Vincent. |
| Mr. Courtney. | Mr. Woods. |
| Mr. Henniker Heaton. | Mr. Buchanan. |
| Sir John Hibbert. | Mr. Burns. |
| Mr. Stephens. | Captain Norton. |

Mr. COURTNEY was called to the Chair.

The Committee deliberated.

[Adjourned to Monday next.

---

*Monday*, 24*th June* 1895.

MEMBERS PRESENT:

Mr. COURTNEY in the Chair.

| | |
|---|---|
| Mr. Michael Austin. | Sir John Hibbert. |
| Mr. Woods. | Mr. Laurence Hardy. |
| Colonel Howard Vincent. | Mr. Stephens. |

The Committee deliberated.

[Adjourned to Friday next, at Twelve o'clock.

---

*Friday*, 28*th June* 1895.

MEMBERS PRESENT:

Mr. COURTNEY in the Chair.

| | |
|---|---|
| Mr. Hough. | Captain Norton. |
| Mr. Michael Austin. | |

[There being no quorum, the Committee adjourned to Monday next, at Half-past Two o'clock.

---

## *Monday*, 1*st July* 1895.

MEMBERS PRESENT:

Sir JOHN HIBBERT in the Chair.

| | |
|---|---|
| Mr. Michael Austin. | Mr. Lough. |
| Mr. Burns. | Captain Norton. |
| Mr. Laurence Hardy. | Colonel Howard Vincent. |
| Mr. Henniker Heaton. | |

In the absence of the Chairman, Sir JOHN HIBBERT took the Chair.

DRAFT REPORT, proposed by the *Chairman*, brought up, and read the first time, as follows:—

"Your Committee have met to consider the matters to them referred, but seeing that it is not possible for them to commence the Inquiry at this period of the Session, they recommend that the Ten years' existing Contracts be not renewed till the Committee report, and that the Committee be re-appointed next Parliament with fuller powers to continue the Inquiry."

DRAFT REPORT, read a second time, and *agreed to.*

Question, That this Report be the Report of the Committee to the House,—put, and *agreed to.*

*Ordered*, To Report.

# REPORT

FROM THE

SELECT COMMITTEE

ON

# STATIONERY OFFICE PRINTING CONTRACTS;

WITH THE

PROCEEDINGS OF THE COMMITTEE.

---

*Ordered, by* The House of Commons, *to be Printed*,
2 *July* 1895.

---

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# SPECIAL REPORT

AND

# REPORT

FROM THE

## SELECT COMMITTEE

ON

# STEAM ENGINES (PERSONS IN CHARGE) BILL;

WITH THE

## PROCEEDINGS OF THE COMMITTEE.

---

*Ordered, by* The House of Commons, *to be Printed*,
22 *May* 1895.

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JOHN MENZIES & Co., 12, Hanover Street, Edinburgh, and
90, West Nile Street, Glasgow; or
HODGES, FIGGIS, & Co., Limited, 104, Grafton Street, Dublin.

274.

## Steam Engines (Persons in Charge) Bill.

*Wednesday, 3rd April* 1895]:—Bill read a second time, and committed to a Select Committee.

*Ordered,*—[*Wednesday, 1st May* 1895]:—That the Committee do consist of Seventeen Members.

Committee nominated of—

| | |
|---|---|
| Mr. William Allan. | Sir James Joicey. |
| Mr. Brunner. | Sir Seymour King. |
| Mr. Fenwick. | Mr. Wilson Lloyd. |
| Colonel Gourley. | Mr. Paulton. |
| Mr. Laurence Hardy. | Mr. Renshaw. |
| Mr. Heath. | Mr. John Wilson (Durham). |
| Sir Alfred Hickman. | Mr. Woods. |
| Sir Edward Hill. | Mr. Wrightson. |
| Sir Benjamin Hingley. | |

That the Committee have power to send for Persons, Papers, and Records.

That Five be the Quorum of the Committee.

*Ordered,*—[*Friday, 3rd May* 1895]:—That the Select Committee on Steam Engines (Persons in Charge) Bill do consist of Nineteen Members.

That Major Darwin and Mr. Havelock Wilson be added to the Committee.

SPECIAL REPORT AND REPORT - - - - - - - p. iii

PROCEEDINGS OF THE COMMITTEE - - - - - - - - p. v

# SPECIAL REPORT.

THE SELECT COMMITTEE to whom the STEAM ENGINES (PERSONS IN CHARGE) BILL was referred;——HAVE agreed to the following SPECIAL REPORT:—

1. YOUR Committee met for the consideration of the Bill.

2. A Resolution was carried to the effect that no evidence should be taken on the subject of Agricultural Engines, Public Railways, or Steamships.

3. Whereupon your Committee, feeling that under the circumstances it is not desirable to proceed with the Bill referred to them, inasmuch as the subject in their opinion could not adequately be dealt with, decided not to proceed further with the Bill.

22 *May* 1895.

# REPORT.

THE SELECT COMMITTEE to whom the STEAM ENGINES (PERSONS IN CHARGE) BILL was referred;——HAVE agreed to Report the same, without Amendment.

22 *May* 1895.

# PROCEEDINGS OF THE COMMITTEE.

## *Tuesday*, 14*th May* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Mr. Brunner. | Sir Edward Hill. |
| Major Darwin. | Sir Benjamin Hingley. |
| Mr. Fenwick. | Sir Seymour King. |
| Colonel Gourley. | Mr. Paulton. |
| Mr. Laurence Hardy. | Mr. Renshaw. |
| Mr. Heath. | Mr. John Wilson (Durham). |
| Sir Alfred Hickman. | Mr. Wrightson. |

Sir EDWARD HILL was called to the Chair.

The Committee deliberated.

[Adjourned to Wednesday, 22nd May, at Twelve o'clock.

## *Wednesday*, 22*nd May* 1895.

MEMBERS PRESENT:

Sir EDWARD HILL in the Chair.

| | |
|---|---|
| Mr. Laurence Hardy. | Sir Seymour King. |
| Mr. Renshaw. | Sir Alfred Hickman. |
| Mr. John Wilson (Durham). | Sir Benjamin Hingley. |
| Mr. Havelock Wilson (Hull). | Major Darwin. |
| Sir James Joicey. | Mr. Heath. |
| Mr. William Allan. | Mr. Brunner. |
| Mr. Wrightson. | Mr. Paulton. |

The Committee deliberated.

Motion made, and Question put, "That no evidence should be taken before this Committee on the subject of agricultural engines, public railways, or steamships"—(*Mr. John Wilson* (Durham)).—The Committee divided:

| Ayes, 7. | Noes, 7. |
|---|---|
| Mr. William Allan. | Mr. Brunner. |
| Major Darwin. | Mr. Heath. |
| Mr. Laurence Hardy. | Sir Alfred Hickman. |
| Sir James Joicey. | Sir Benjamin Hingley. |
| Mr. Paulton. | Sir Seymour King. |
| Mr. Renshaw. | Mr. Havelock Wilson. |
| Mr. John Wilson (Durham). | Mr. Wrightson. |

Whereupon the Chairman declared himself with the Ayes.

Motion

Motion made, and Question put, That the Committee do proceed no further with the Bill—(Mr. *Brunner*).—The Committee divided:

| Ayes, 9. | Noes, 4. |
|---|---|
| Mr. Brunner. | Mr. Darwin. |
| Mr. Laurence Hardy. | Sir James Joicey. |
| Mr. Heath. | Mr. Paulton. |
| Sir Alfred Hickman. | Mr. John Wilson (Durham). |
| Sir Benjamin Hingley. | |
| Sir Seymour King. | |
| Mr. Renshaw. | |
| Mr. Havelock Wilson. | |
| Mr. Wrightson. | |

SPECIAL REPORT, proposed by the *Chairman*, read the first time, as follows:—

"1. YOUR Committee met for the consideration of the Bill.

"2. A Resolution was carried to the effect that no evidence should be taken on the subject of Agricultural Engines, Public Railways, or Steamships.

"3. Whereupon your Committee, feeling that under the circumstances it is not desirable to proceed with the Bill referred to them, inasmuch as the subject in their opinion could not adequately be dealt with, decided not to proceed further with the Bill."

SPECIAL REPORT read a second time, paragraph by paragraph, and *agreed to*.

Question, That this Report be the Special Report of the Committee to the House,—put, and *agreed to*.

STEAM ENGINES (PERSONS IN CHARGE) BILL.

*Ordered*, To Report the Bill, without Amendment.

---

## EXPENSES OF WITNESS.

| NAME of WITNESS. | PROFESSION or CONDITION. | From whence Summoned. | Number of Days Absent from Home, under Orders of Committee. | Allowance during Absence from Home. | Expenses of Journey to London and back. | TOTAL Expenses allowed to Witness. |
|---|---|---|---|---|---|---|
| | | | | £. s. d. | £. s. d. | £. s. d. |
| John Whitburn - - | Secretary of Northern Enginemen's Association. | Newcastle-on-Tyne - - | 3 | 2 5 - | 2 8 3 | 4 13 3 |
| | | | | TOTAL - - £. | | 4 13 3 |

---

# SPECIAL REPORT

AND

# REPORT

FROM THE

# SELECT COMMITTEE

ON

# STEAM ENGINES (PERSONS IN CHARGE) BILL;

WITH THE

PROCEEDINGS OF THE COMMITTEE.

---

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22 *May* 1895.

---

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# REPORT

FROM THE

## STANDING COMMITTEE

ON

## LAW, AND COURTS OF JUSTICE, AND LEGAL PROCEDURE,

ON THE

# SUMMARY JURISDICTION (MARRIED WOMEN) BILL;

WITH THE

## PROCEEDINGS OF THE COMMITTEE.

---

*Ordered, by* The House of Commons, *to be Printed,*
17 *June* 1895.

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1895.

## STANDING COMMITTEE ON LAW, AND COURTS OF JUSTICE, AND LEGAL PROCEDURE.

[*Tuesday, 26th February* 1895]:—Sir John Mowbray reported from the Committee of Selection; That they had nominated the following Members to serve on the Standing Committee for the consideration of all Bills relating to Law, and Courts of Justice, and Legal Procedure, which may, by Order of the House, be committed to such Standing Committee:—

Committee nominated of—

Mr. Ambrose.
Mr. Asquith.
Mr. Atherley-Jones.
Mr. Bartley.
Mr. Beach.
Mr. Bolitho.
Mr. Jacob Bright.
Mr. Brodrick.
Mr. Bryce.
Mr. John Burns.
Mr. Carson.
Sir Edward Clarke.
Mr. Courtney.
Mr. Donald Crawford.
Mr. Cremer.
Mr. Curzon.
Mr. Darling.
Sir Charles Dilke.
Mr. Dillon.
Sir William Hart Dyke.
Mr. A. de Tatton Egerton.
Mr. John Ellis.
Mr. Evans.
Sir Walter Foster.
Mr. Henry H. Fowler.
Mr. Herbert Gardner.
Mr. Gathorne-Hardy.
Mr. Herbert Gladstone.
Mr. Haldane.
Sir Charles Hall.
Sir Edward Harland.
Mr. Maurice Healy.
Mr. T. M. Healy.
Mr. Staveley Hill.
Mr. Samuel Hoare.
Mr. Henry Hobhouse.
Sir Ughtred Kay-Shuttleworth.
Mr. Kenyon.
Mr. Knox.
Mr. Lawrence.
Mr. Shaw Lefevre.
Mr. Lloyd-George.
The Lord Advocate.
Mr. James William Lowther.
Mr. McNeill.
Mr. Matthews.
Sir Samuel Montagu.
Mr. John Morley.
Mr. Edward Morton.
Mr. Mount.
Mr. Mulholland.
Mr. Muntz.
Mr. William O'Brien.
Mr. Paul.
Sir Charles Pearson.
Mr. Pickard.
Sir Francis Powell.
Mr. John Redmond.
Mr. Bryn Roberts.
Sir George Russell.
Mr. Parker Smith.
Mr. Solicitor General.
Mr. Francis Stevenson.
Mr. Storey.
Mr. Taylor.
Sir Richard Temple.
Mr. Webb.
Mr. Whitmore.

## SUMMARY JURISDICTION (MARRIED WOMEN) BILL.

[*Monday, 11th March* 1895]:—*Ordered*, That all Standing Committees have leave to print, and circulate with the Votes, the Minutes of their Proceedings, and any amended Clauses of Bills committed to them.

[*Friday, 15th March* 1895]:—Sir John Mowbray reported from the Committee of Selection; That they had discharged the following Member from the Standing Committee on Law, and Courts of Justice, and Legal Procedure:—Sir Ughtred Kay-Shuttleworth; and had appointed in substitution: Mr. Hopwood.

[*Friday, 22nd March* 1895]:—Sir Joseph Mowbray reported from the Committee of Selection; That they had discharged the following Member from the Standing Committee on Law, and Courts of Justice, and Legal Procedure:—Sir Walter Foster; and had appointed in substitution: Mr. Seale-Hayne.

[*Tuesday, 9th April* 1895]:—Sir John Mowbray reported from the Committee of Selection; That they had added to the Standing Committee on Law, and Courts of Justice, and Legal Procedure, the following Fifteen Members in respect of the Church Patronage Bill:—Mr. Griffith-Boscawen, Viscount Cranborne, Mr. Dodd, Mr. Everett, Sir James Fergusson, Mr. Fisher, Mr. MacInnes, Mr. Lloyd Morgan, Mr. Roby, Mr. George Russell, Colonel Sandys, Mr. Talbot, Mr. Warner, Mr. Carvell Williams, and Viscount Wolmer.

Sir Matthew White Ridley reported from the Chairmen's Panel; That they had appointed Sir Matthew White Ridley to act as Chairman of the Standing Committee for the consideration of Bills relating to Law, and Courts of Justice, and Legal Procedure, in the place of Mr. Arthur O'Connor.

[*Tuesday, 7th May* 1895]:—Sir John Mowbray reported from the Committee of Selection; That they had discharged the following Members from the Standing Committee on Trade (including Agriculture and Fishing), Shipping and Manufactures:—Sir Joseph Pease and Sir Mark Stewart; and had appointed in substitution: Mr. Gerald Balfour and Mr. Johnson-Ferguson.

Sir John Mowbray further reported from the Committee; That they had discharged the following Member from the Standing Committee on Law, and Courts of Justice, and Legal Procedure:—Mr. Samuel Hoare; and had appointed in substitution: Mr. Jebb.

[*Wednesday, 22nd May* 1895]:—Summary Jurisdiction (Married Women) Bill, read a second time.

[*Monday, 27th May* 1895]:—Summary Jurisdiction (Married Women) Bill, committed to the Standing Committee on Law, and Courts of Justice, and Legal Procedure.

[*Thursday, 30th May* 1895]:—Sir George Osborne Morgan reported from the Chairmen's Panel; That they had appointed Sir George Osborne Morgan to act as Chairman of the Standing Committee for the consideration of Bills relating to Law, and Courts of Justice, and Legal Procedure, in the place of Sir Matthew White Ridley; and that they had appointed Mr. Stansfeld to act as Chairman for the consideration of Bills committed to the Standing Committee (Scotland).

[*Tuesday, 11th June* 1895]:—Sir John Mowbray reported from the Committee of Selection; That they had added to the Standing Committee on Law, and Courts of Justice, and Legal Procedure, the following Fifteen Members in respect of the Summary Jurisdiction (Married Women) Bill:—Mr. Bucknill, Mr. Butcher, Mr. Byrne, Mr. Cozens-Hardy, Sir John Gorst, Mr. Knowles, Sir Joseph Leese, Mr. Macdona, Mr. Walter M'Laren, Mr. Neville, Mr. Bowen Rowlands, Mr. James Rowlands, Mr. Schwann, Mr. James Stuart, and Sir Richard Webster.

# REPORT.

THE STANDING COMMITTEE on LAW, and COURTS OF JUSTICE, and LEGAL PROCEDURE, to whom the SUMMARY JURISDICTION (MARRIED WOMEN) BILL was referred;——HAVE gone through the same, and made Amendments thereunto.

17 *June* 1895.

# STANDING COMMITTEE ON LAW, AND COURTS OF JUSTICE, AND LEGAL PROCEDURE.

*Monday*, 17*th June* 1895.

MEMBERS PRESENT:

Sir GEORGE OSBORNE MORGAN in the Chair.

Mr. Attorney General.
Mr. Bartley.
Mr. Bolitho.
Mr. Byrne.
Mr. Dillon.
Mr. A. de Tatton Egerton.
Mr. John Ellis.
Mr. Haldane.
Mr. Staveley Hill.
Mr. Hopwood.
Sir Joseph Leese.
Mr. Walter M'Laren.
Mr. Mount.
Sir Charles Pearson.
Sir Francis Powell.
Mr. John Redmond.
Mr. James Rowlands.
Mr. Schwann.
Mr. Solicitor General.

## SUMMARY JURISDICTION (MARRIED WOMEN) BILL.

Clauses 1—3, *agreed to.*

Clause 4.

Amendment proposed, in page 1, lines 13, 14, to leave out the words "by a court of competent jurisdiction," and insert the words "upon indictment"—(Mr. *Byrne*).—Question, That the words proposed to be left out stand part of the Clause,—put, and *negatived.*

Question, That the words "upon indictment" be there inserted,—put, and *agreed to.*

Another Amendment proposed, in page 1, line 17, after the word "cruelty," to insert the words "to her"—(Mr. *Byrne*).—Question, That those words be there inserted,—put, and *agreed to.*

Another Amendment proposed, in page 1, line 18, after the word "children," to insert the words "whom he is legally liable to maintain"—(Mr. *Byrne*).—Question, That those words be there inserted,—put, and *agreed to.*

Another Amendment proposed, in page 1, line 19, to leave out the word "thereby," and insert the words "by such cruelty or neglect"—(Mr. *Byrne*).—Question, That the word "thereby" stand part of the Clause,—put, and *negatived.*

Question, That the words "by such cruelty or neglect" be there inserted,—put, and *agreed to.*

Another Amendment made.

Another Amendment proposed, in page 1, line 24, at the end of the Clause, to add the words: "Provided that where a married woman is entitled to apply for an order or orders under this section on the ground of the conviction of her husband upon indictment she may apply to the court before whom her husband has been convicted, and that court shall, for the purposes of this section, become a court of summary jurisdiction, and shall have the power without a jury to hear an application and make the order or orders applied for"—(Mr. *Byrne*).—Question, That those words be there added,—put, and *agreed to.*

Clause, as amended, *agreed to.*

Clause 5, *agreed to.*

Clause 6,

Clause 6.

Amendment proposed, in page 2, line 16, to leave out the words "which has not been condoned" and add the words "provided that the husband has not condoned or connived at, or by his wilful neglect or misconduct conduced to such act of adultery"—(Mr. *Byrne*).—Question, That the words proposed to be left out stand part of the Clause,—put, and *negatived*.

Question, That those words be there added,—put, and *agreed to*.

Clause, as amended, *agreed to*.

Clauses 7—10, *agreed to*.

Clause 11.

Amendment proposed, in page 3, line 12, after the word "probate," to insert the word "divorce"—(Mr. *Byrne*).—Question, That the word "divorce" be there inserted,—put, and *agreed to*.

Another Amendment proposed at the end of the Clause, to add the words "and until altered or repealed any rules already made as to appeals under Section 4 of the Matrimonial Causes Act, 1878, shall apply to appeals under this Act"—(Mr. *Byrne*).—Question, That those words be there added,—put, and *agreed to*.

Clause, as amended, *agreed to*.

Clause 12, *agreed to*.

Schedule, *agreed to*.

*Ordered*, To Report the Bill, as amended, to the House.

# REPORT

FROM THE

STANDING COMMITTEE

ON

THE COURTS OF SUMMARY JURISDICTION
PROCEEDINGS

ON

# SUMMARY JURISDICTION (MARRIED WOMEN) BILL:

WITH THE

PROCEEDINGS OF THE COMMITTEE.

---

*Ordered*, by The House of Commons, *to be Printed*,
17 *June* 1895.

---

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# REPORT

FROM THE

# SELECT COMMITTEE

ON THE

# TELEPHONE SERVICE;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

MINUTES OF EVIDENCE,

APPENDIX AND INDEX.

---

*Ordered, by* The House of Commons, *to be Printed,*
1 *July* 1895.

---

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90, West Nile Street, Glasgow; or
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350.

## Telephone Service.

*Ordered*,—[*Friday*, 1*st March* 1895]:—That a Select Committee be appointed to consider and report whether the provision now made for the telephone service in local areas is adequate, and whether it is expedient to supplement or improve this provision either by the granting of licences to local authorities or otherwise.

Committee nominated—[*Thursday*, 14*th March* 1895]—of—

Captain Bagot.
Mr. Baird.
Mr. Benn.
Sir Charles Cameron.
Mr. John Ellis.
Sir James Fergusson.
Sir Julian Goldsmid.
Sir John Gorst.
Mr. Grant Lawson.
Mr. Solicitor General.
Mr. Arnold Morley.
Mr. Moulton.
Mr. Snape.
Lord Stanley.
Mr. Tully.

That the Committee have power to send for Persons, Papers, and Records.

That Five be the Quorum of the Committee.

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# REPORT.

THE SELECT COMMITTEE appointed to consider and Report whether the Provision now made for the TELEPHONE SERVICE in Local Areas is adequate; and whether it is expedient to Supplement or Improve this Provision either by the granting of Licences to Local Authorities or otherwise;——HAVE agreed to the following REPORT:—

YOUR Committee have examined numerous Witnesses upon the Matter referred to them, and have completed their Evidence, but have not, in view of the approaching Dissolution of Parliament, had sufficient time to consider their Report. They have therefore agreed to Report the Evidence they have taken to the House, and to recommend that a Committee on the same subject be appointed in the next Session of Parliament, to consider and report upon the Evidence already taken, and, if necessary, to take further Evidence.

1 *July* 1895.

# PROCEEDINGS OF THE COMMITTEE.

## *Tuesday*, 19*th March* 1895.

MEMBERS PRESENT:

Captain Bagot.
Mr. Benn.
Sir Charles Cameron.
Mr. John Ellis.
Sir James Fergusson.
Sir Julian Goldsmid.
Mr. Arnold Morley.
Mr. Moulton.
Mr. Snape.
Mr. Tully.
Lord Stanley.

Mr. ARNOLD MORLEY was called to the Chair.

The Committee deliberated.

[Adjourned till Friday next, at Half-past Eleven o'clock.

---

## *Friday*, 22*nd March* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

Mr. Tully.
Mr. Grant Lawson.
Captain Bagot.
Mr. Snape.
Sir James Fergusson.
Mr. Solicitor General.
Lord Stanley.
Sir Charles Cameron.
Mr. Benn.
Sir Julian Goldsmid.
Mr. Baird.

Mr. *J. C. Lamb*, C.B., C.M.G., and Sir *Robert Hunter*, were examined.

[Adjourned till Friday next, at Half-past Eleven o'clock.

---

## *Friday*, 29*th March* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

Mr. Tully.
Captain Bagot.
Mr. Snape.
Sir James Fergusson.
Mr. John Ellis.
Sir Charles Cameron.
Mr. Moulton.
Mr. Benn.
Mr. Baird.
Sir Julian Goldsmid.

Mr. *Samuel Chisholm*, Mr. *James Colquhoun*, LL.D., Mr. *Kinloch Anderson*, Sir *James Alexander Russell*, Mr. *George Bassett*, and Sir *John Leng*, LL.D. [a Member of the House], were examined.

[Adjourned till Friday next, at Half-past Eleven o'clock.

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## *Friday, 5th April* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Snape. | Sir Julian Goldsmid. |
| Sir John Gorst. | Mr. Moulton. |
| Sir James Fergusson. | Mr. Tully. |
| Mr. Solicitor General. | Captain Bagot. |
| Mr. John Ellis. | Lord Stanley. |
| Sir Charles Cameron. | Mr. Benn. |
| Mr. Baird. | |

Mr. *Harcourt Clare*, Mr. *John Harrison*, and Mr. *W. H. Dickinson*, were examined.

[Adjourned till Friday, 26th April, at Half-past Eleven o'clock.

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## *Friday, 26th April* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Grant Lawson. | Mr. John Ellis. |
| Captain Bagot. | Sir Charles Cameron. |
| Mr. Snape. | Sir Julian Goldsmid. |
| Sir John Fergusson. | Lord Stanley. |
| Mr. Solicitor General. | |

Mr. *W. H. Dickinson* was further examined.

Sir *Edward H. Carbutt*, Bart., M.F.C.E., Major *S. Flood-Page*, and Mr. *H. Montague Bates*, were examined.

[Adjourned till Tuesday next, at Half-past Eleven o'clock.

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## *Tuesday, 30th April* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Grant Lawson. | Mr. Benn. |
| Mr. Snape. | Sir John Gorst. |
| Sir James Fergusson. | Mr. Solicitor General. |
| Mr. John Ellis. | |

Mr. *George Berridge*, Mr. *John Archibald Dow*, Mr. *Robert Kay*, Mr. *James P. Waldie*, Mr. *Alexander Riach*, Mr. *Moncur*, and Mr. *James Crombie*, were examined.

[Adjourned till Friday next, at Half-past Eleven o'clock.

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## *Friday, 3rd May* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Grant Lawson. | Mr. Benn. |
| Captain Bagot. | Mr. Baird. |
| Sir James Fergusson. | Sir Julian Goldsmid. |
| Mr. Solicitor General. | Lord Stanley. |
| Sir Charles Cameron. | |

The Committee deliberated.

Motion made, and Question put, "That in addition to the Evidence asked for by the Committee from Mr. *A. D. Provand* (a Member of this House), on the two points named in their letter of 30th April, Evidence be also received from him with regard to the Mutual Telephone Company, and the New Telephone Company in Manchester"—(Sir *Charles Cameron*).—The Committee divided:

| Ayes, 4. | Noes, 5. |
|---|---|
| Captain Bagot. | Sir James Fergusson. |
| Mr. Baird. | Sir Julian Goldsmid. |
| Mr. Benn. | Mr. Grant Lawson. |
| Sir Charles Cameron. | Mr. Solicitor General. |
| | Lord Stanley. |

Mr. *A. D. Provand* (a Member of the House), was examined.

Mr. *W. H. Preece*, F.R.S., was examined.

[Adjourned till Tuesday next, at Half-past Eleven o'clock.

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## *Tuesday, 7th May* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Tully. | Mr. Benn. |
| Captain Bagot. | Mr. Baird. |
| Mr. Grant Lawson. | Lord Stanley. |
| Sir James Fergusson. | Mr. Snape. |
| Mr. Solicitor General. | Mr. Moulton. |
| Mr. John Ellis. | |

Mr. *W. H. Preece*, F.R.S., was further examined.

Mr. *R. E. Crompton* and Professor *Sylvanus Thompson*, were examined.

[Adjourned till Tuesday next, at Half-past Eleven o'clock.

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## *Tuesday, 14th May* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Snape. | Mr. Baird. |
| Sir James Fergusson. | Mr. Tully. |
| Mr. John Ellis. | Mr. Solicitor General. |
| Sir Charles Cameron. | Sir John Gorst. |
| Mr. Benn. | Lord Stanley. |
| Mr. Grant Lawson. | |

Major General *C. E. Webber*, R.E., C.B., was examined.

[Adjourned till Tuesday next, at Half-past Eleven o'clock.

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## *Tuesday*, 21*st May* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Baird. | Mr. Snape. |
| Sir James Fergusson. | Lord Stanley. |
| Mr. John Ellis. | Captain Bagot. |
| Sir Charles Cameron. | Mr. Tully. |
| Mr. Benn. | Sir John Gorst. |
| Mr. Grant Lawson. | |

Mr. *J. G. Ward*, M.H.A., and Mr. *James Staats Forbes*, were examined.

Mr. *W. H. Dickinson* was further examined.

[Adjourned till Friday next, at Half-past Eleven o'clock.

## *Friday*, 24*th May* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Tully. | Sir Charles Cameron. |
| Captain Bagot. | Mr. Benn. |
| Mr. Snape. | Mr. Grant Lawson. |
| Sir John Gorst. | Mr. Baird. |
| Sir James Fergusson. | Lord Stanley. |

Mr. *James Staats Forbes* was further examined.

[Adjourned till Tuesday next, at Twelve o'clock.

## *Tuesday*, 28*th May* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Mr. Snape. | Mr. Benn. |
| Lord Stanley. | Mr. Baird. |
| Sir James Fergusson. | Mr. Grant Lawson. |
| Mr. Solicitor General. | Mr. Tully. |
| Sir Charles Cameron. | Mr. John Ellis. |

The Committee deliberated.

Motion made, and Question put, "That the Evidence tendered by Mr. *Bennett* and Mr. *Hay* be received"—(Sir *Charles Cameron*).—The Committee divided:

| Ayes, 3. | Noes, 4. |
|---|---|
| Mr. Benn. | Sir James Fergusson. |
| Sir Charles Cameron. | Mr. Grant Lawson. |
| Mr. Snape. | Mr. Solicitor General |

Whereupon the *Chairman* declared himself with the *Noes*.

Mr. *James Staats Forbes* was further examined.

Mr. *A. C. Morton* (a Member of the House), and Mr. *Beveridge*, were examined.

Mr. *Lamb*, C.M.G., was further examined.

[Adjourned till Tuesday, 25th June, at Half-past Eleven o'clock.

*Tuesday, 25th June* 1895.

MEMBERS PRESENT:

Mr. ARNOLD MORLEY in the Chair.

| | |
|---|---|
| Captain Bagot. | Sir John Gorst. |
| Mr. Baird. | Mr. Grant Lawson. |
| Sir Charles Cameron. | Mr. Moulton. |
| Sir John Ellis. | Mr. Snape. |
| Sir James Fergusson. | Lord Stanley. |

DRAFT REPORT, proposed by the *Chairman*, read the first time as follows:

"Your Committee have examined numerous Witnesses upon the matter referred to them, and have completed their Evidence, but have not, in view of the approaching Dissolution of Parliament, had sufficient time to consider their Report. They have therefore agreed to Report the Evidence they have taken to the House, and to recommend that a Committee on the same subject be appointed in the next Session of Parliament, to consider and report upon the Evidence already taken, and, if necessary, to take further Evidence."

DRAFT REPORT, read a second time, and *agreed to*.

*Ordered*, To Report, together with the Minutes of Evidence and an Appendix.

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## EXPENSES OF WITNESS.

| NAME OF WITNESS. | PROFESSION OR CONDITION. | From whence Summoned. | Number of Days Absent from Home under Orders of Committee. | Allowance during Absence from Home. | Expenses of Journey to London and back. | TOTAL Expenses allowed to Witness. |
|---|---|---|---|---|---|---|
| | | | | £. s. d. | £. s. d. | £. s. d. |
| George Blasset - - | Contractor - - | Aberdeen - - - | 3 | 3 3 – | 6 18 6 | 10 1 6 |

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# MINUTES OF EVIDENCE.

*Friday, 22nd March* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Captain Bagot. | Mr. Grant Lawson. |
| Mr. Baird. | Mr. Arnold Morley. |
| Mr. Benn. | Mr. Snape. |
| Sir Charles Cameron. | Mr. Solicitor General. |
| Sir James Fergusson. | Lord Stanley. |
| Sir Julian Goldsmid. | Mr. Tully. |

The Right Honourable ARNOLD MORLEY, IN THE CHAIR.

Mr. JOHN CAMERON LAMB, C.B., C.M.G., called in; and Examined.

*Chairman.*

1. You are an Assistant Secretary of the Post Office, and in charge of the Telegraph Department, are you not?—Yes.

2. You have been so, I think, since 1889?—Since April 1889.

3. When you followed Mr. Patey?—Yes.

4. I propose, in the first place, to ask a few questions with regard to the history of the telephone. When did the telephone first come into this country?—The first telephone was brought to this country by Lord Kelvin in 1876; it was in a very crude form. What might be called the first practical telephones were brought over in the following year by two officers of the Post Office who had been in America, Mr. Preece and Mr. Fischer. Professor Graham Bell presented each of them with a pair of his telephones.

5. Up to that time had there been anything corresponding to a telephone system?—The Post Office had had an exchange system worked with A. B. C. telegraph instruments. Before the Post Office, the Universal Private Telegraph Company had the same system in Newcastle-on-Tyne. They began that system in 1864, and their undertaking was purchased by the Post Office under the Telegraph Act of 1868; and this system of exchange, or putting one subscriber through to another by means of a switch, was extended by the Post Office, still with the A. B. C. telegraph instruments, to several other towns.

6. That was a system corresponding to the telephone system, only telegraph instruments were used instead of telephones?—Exactly; A. B. C.'s were used instead of telephones.

*Chairman*—continued.

7. Then you say that in 1878 the telephone was brought over from America?—In 1877 the first practical telephones were brought to this country, but they were not very efficient instruments, and it did not then appear that they were likely to be very useful; but, nevertheless, the Post Office made arrangements with the agents of the inventor, and secured the use of this apparatus for its private wire renters, in case any of them cared to have it.

8. And in 1878 there was an improvement invented, was not there, by Professor Hughes?—Yes; in 1878 Professor Hughes invented the microphone, and the microphone, used in conjunction with the telephone, converted it into a thoroughly practical means of transmitting speech.

9. And at that time was a company formed?—Yes; in the same year, 1878, a company was established for the purpose of acquiring and working Bell's patent for the telephone; and at first this company, to all appearance, was feeling its way; it did not announce any definite plan of business. In 1879 it sought an alliance with the Post Office, under which the Post Office would obtain telephones at cost price, and would in return facilitate the operations of the company. The company proposed to supply telephones and telephone wires to private persons. At that time there was no suggestion of an exchange system. The negotiations came to nothing. In the same year the Edison Telephone Company of London was established, and in the autumn of the year announcements began to be made in the public press that it was proposed to establish telephone exchanges. That was the

*Chairman*—continued.

first suggestion in this country on the part of a company to establish a telephone exchange. I might, perhaps, mention that the first telephone exchange in the world is understood to have been established in Chicago in 1878.

10. That is the year before this proposal was made in England?—That is the year before this proposal was made in England. I do not know whether you would like me to carry on the history a little?

11. I think so, if you would, please?—Immediately on this announcement appearing, of the proposal to establish telephone exchanges, the Post Office pointed out that the proposed operations would infringe the Postmaster General's rights, and an information was filed against the Edison Company on the 27th November, and against the United Telephone Company on the 20th December.

12. Are those the rights of the Postmaster General under the Act of 1868?—Rather, under the Act of 1869, which conferred on him the exclusive right of transacting telegraph business. In June of the following year (that is 1880), these two companies amalgamated under the title of "The United Telephone Company, Limited."

Mr. *Benn.*

13. That is Bell's and Edison's?—Yes. Legal proceedings occupied the whole of that year, and on the 20th December judgment was given in the High Court of Justice in favour of the Post Office. In anticipation of this judgment the Post Office made arrangements to establish telephone exchanges of its own, and steps were taken to obtain a sufficient number of telephones to enable the department to carry out the work. At the same time the department entered into negotiations with the Telephone Company for the grant to the Telephone Company of a license. Perhaps, I ought to say under what authority the license was to be given.

*Chairman.*

14. It would, I think, be desirable?—It was to be given under what was interpreted to be an authority under the Telegraph Act, 1869, 32 & 33 Vict. c. 73. To explain the matter, I must quote a little from the preamble and one of the clauses, and then show what the exception to the Postmaster General's exclusive right was. The preamble of this Act contains the following words: "And whereas in order to protect the public revenue it is expedient that similar powers to those conferred upon the Postmaster General with respect to the exclusive privilege of conveying letters should be enacted with reference to the transmission of public telegraphic messages within the United Kingdom of Great Britain and Ireland." Then Clause 4 says: "The Postmaster General by himself, or by his deputies and his and their respective servants and agents, shall, from and after the passing of this Act, have the exclusive privilege of transmitting telegrams within the United Kingdom of Great Britain and Ireland, except as hereinafter provided, and shall also

*Chairman*—continued.

within that kingdom have the exclusive privilege of performing all the incidental services of receiving, collecting, or delivering telegrams except as hereinafter provided." Then comes the exception under which it was held that the Postmaster General had the power to grant licenses, and it runs as follows: "Telegrams transmitted, with the written license or consent, either special or general, of the Postmaster General under the hand of any officer of the Post Office authorised for that purpose by the Postmaster General." It was under the power, which it was held was conferred on the Postmaster General in that exception, that the Post Office entered into negotiations to grant licenses for telephone exchange business.

15. And it is under that power that licenses have been subsequently granted?—Quite so.

Sir *Julian Goldsmid.*

16. Was not that also a part of the arrangement with the Telephone Company in order that they might not appeal. I think it is known that there was an intention to appeal against the court which was in favour of the Post Office; was that so?—Certainly. I was coming to that. The company, when they accepted the license, at the same time accepted the judgment. They were allowed to proceed with their operations, and they decided not to appeal against the judgment, which was in favour of the Postmaster General. That is quite so.

17. The condition of their not appealing was that those licenses should be granted, was it not?—I do not know that it was quite as the honourable Member suggests; I think I would rather say that there was a willingness on the part of the Government of the day to give these licenses. It was not exactly a bargain, I think, in the way the honourable Member suggests, but it was undoubtedly the case that the company accepted the judgment. I am speaking from my best recollection subject to correction.

*Chairman.*

18. I suppose if the companies could at all have successfully carried on an appeal against the decision, they would, in all probability, have done so?—Quite so. The Post Office had not the least doubt of its rights; it had the very best possible advice that there was not any fear: that it need not apprehend anything from an appeal.

19. I may take it that the policy of the Post Office in granting licenses was not influenced or biassed by any fear that the decision of the court would be overruled?—No; I am under that impression very strongly. If I may continue the history, I should say that on the 20th December (this is still 1880), the day on which the judgment was given in the High Court of Justice, the Post Office issued an advertisement in the principal papers of the country, describing its A. B. C. telegraph exchange system, which had been in operation at Newcastle-on-Tyne and other towns, announcing that the telephone would be substituted on those systems for the A. B. C., and offering to establish telephone exchange systems wherever they

*Chairman*—continued.

they were required by the public. Now I was coming to the point that the honourable Member raised; I do not know whether I need repeat it, but merely to get the date, perhaps I had better. In April 1881 the United Telephone Company was granted a license to carry on a telephone exchange business in London, and the company accepted the judgment of the High Court of Justice. The radius within which they were to carry on their operations was to be five miles from a central point selected by themselves, and of course a royalty was to be paid to the Post Office. As to the provinces, the policy of the United Company was to confine its own exchange operations to London, and to allow its patent apparatus to be used in other parts of the country by subsidiary companies, and it left these subsidiary companies to negotiate with the Post Office for licenses for provincial towns.

20. The company had a practical monopoly, had not they, of some of the patents, at all events?—The United Company were owners of the master patents, and in that way had a practical monopoly of telephone apparatus, with the exception of certain quantities of telephone apparatus which had been acquired by the Post Office, and by a few other people, throughout the country, which were held to be outside the rights of the United Company. I am not sure that I can give a perfect legal explanation of the matter, but they were outside in this way: The United Telephone Company only acquired their position of monopoly by disclaiming various details of the telephone; thus bringing within their patent rights variations of the telephone that had previously been outside the patent. When they secured by disclaimer a practical right over all telephones the apparatus which was already either in use, or which certain people had the right to use, was excluded from the operation of the disclaimers by fiat of the Attorney General, and therefore, in so far as that quantity of apparatus was concerned, the United Telephone Company had no power of bringing action against the users; and it was only as regards the future that they held a position of monopoly a very strong position, but it was only as regards the future.

21. But those patents have now come to an end?—Yes.

22. They have all come to an end now?—Yes; I thought I would explain that, because I thought it might be asked how it was that the Post Office had secured certain apparatus, and how it was that one or two other people had secured apparatus.

Mr. *Snape.*

23. What condition was attached to the licenses as to duration?—The whole of the licenses were for 31 years.

24. How is it they are at an end now?—Perhaps I misunderstood the honourable Member. I understood him to refer to the licenses that were given by the Post Office to the telephone companies, but perhaps I have misunderstood him. If he refers to the patents, they are at an end.

*Chairman.*

25. Will you go on, please, with the history?—I was just going to explain, that when once the license to the United Company was settled, licenses on similar terms, but with not so wide a radius, were granted to companies in the provinces, and all these licenses were for 31 years.

Captain *Bagot.*

26. In what year was it that the licenses were granted to the companies in the provinces?—They began to be granted in the year 1881.

27. The same year?—Yes.

Mr. *Snape.*

28. The license continued for 31 years; no matter in what subsequent year it was taken up, did not it?—The 31 years was to run in all cases from the same date; from the date of the original license to the United Company.

29. Have you that date?—It was in 1881; I do not know whether that is near enough.

30. That is quite sufficient?—I think I can answer the honourable Member's question in another way. All the licenses were granted so as to expire on the 31st December 1911. There is a little matter here that it might be well to mention. In 1881 the Postmaster General allowed the exchanges of the companies to be connected with post offices, to enable the company's subscribers to send telegrams for transmission over the public wires. The use of the connection was limited to that. It was merely to enable them to send telegrams into a post office for transmission over the public wires.

*Chairman.*

31. Through the Exchange?—Through the Exchange. The companies were to provide the wires, and the Post Office was to charge for the cost of working them at the Post Office end. The companies availed themselves of this privilege, but only to a limited extent; meanwhile, the Post Office itself established telephone exchanges in several additional towns, amongst others Cardiff and Newport.

32. Up to that time, had there been any trunk wire connections between the large towns?—No, there had not been any; but negotiations took place between the companies and the Department for the construction of trunk wires to connect one town with another, and the Post Office offered to supply trunk wires, on condition that the persons using them should pay the Department direct. This offer was not accepted but in a few cases wires between one town and another were provided by the Department for the use of the companies, at a fixed annual rental. For instance, a wire was provided from London to Brighton, and the company paid the Post Office for the use of that wire a fixed annual rental, and used it in their own way.

Sir *Julian Goldsmid.*

33. What company was that?—The United Telephone Company.

*Chairman.*

34. At that time, of course, no company had a license, except within the restricted area to which the license referred?—That is so.

35. And, therefore, they had no powers to make the trunk lines?—They had no powers themselves to erect trunk wires between one town and another.

Mr. *Snape.*

36. Then the use of that wire could have been revoked at any time; it did not continue for the 31 years?—No; it was under the agreement for a limited time.

Mr. *Benn.*

37. What was the date of that offer of the Post Office to provide trunk wires?—That was in the year 1881.

Sir *Julian Goldsmid.*

38. Would you tell us whether those exchanges you have mentioned at Cardiff and Newport exist now in the hands of the Post Office?—Yes, they do.

*Chairman.*

39. Altogether, how many towns have been supplied by the Post Office with telephone exchanges; you have mentioned, I think, Newcastle, Cardiff, and Newport?—Yes. If I give you the number of towns will that do, or shall I give the names?

40. The number of the towns will be sufficient?—Thirty separate towns, with a few outlying villages connected with those towns. Some of those towns, I ought to explain, are small; for instance, Morpeth. Meanwhile, the Postmaster General was gradually granting licenses to the companies for additional towns.

41. Was that the existing companies, or new companies?—In some cases to new companies, but generally to these subsidiary companies of the United Telephone Company to which I have referred. Then, in 1882, a new company, called the London and Globe Telephone Company, appeared on the scene, and applied for a license to carry on exchange business in London. This application raised a good many questions as to competition between one company and another, and the United Telephone Company urged reasons why there should be no competition; but eventually a license was given to the new company, and in the same year the Postmaster General granted licenses for the establishment of exchanges by companies, even in towns where the Post Office had, up to that time, retained the whole business in its own hands. For instance, at Newcastle-on-Tyne, where the Post Office had been carrying on an exchange business for many years, first of all with A. B. C.'s, and then with telephones, a license was given to a company to enter into competition with the Post Office. In 1884 the London and Globe Telephone Company (to which I referred a few minutes ago) was absorbed by the United Telephone Company; and in the same year attacks were made in the House of Commons and in the press on the policy of the Department.

*Chairman*—continued.

On the 22nd May of that year, Mr. Dwyer Gray, in a speech in the House of Commons, accused the Department of practising a policy of strangulation. Mr. Fawcett (who took the whole responsibility on himself, I ought to say) confessed that certain conditions imposed by the Department had checked the development of private telephonic enterprise, and stated that he hoped to be in a position to announce a modification of the conditions. On the 24th June he suggested, in the House of Commons, that the telephone companies should meet and put their demands in writing, and on the 28th July, after consultation with the companies, he sought the authority of the Treasury to abolish all restrictions as to areas, and to throw the whole country open to the operations of the licensees. Mr. Fawcett's policy appears to have been to encourage competition, for in his speech in the House he said: "If there is to be a monopoly in telephonic communication, or any other communication, it had better be in the hands of the Government, which can be controlled, and which is directly amenable to public opinion, rather than that a monopoly should be vested in a private company." Under this new arrangement, of course a royalty was to be maintained, and the operations of the company were to be still limited to oral communications; there was to be no transmission of written telegrams; the Treasury sanctioned the arrangement, and it was announced in the House of Commons by Mr. Fawcett on the 7th August 1884. As a result of this, the licenses now held by the companies were given in substitution for the old licenses; if necessary, I can supply the Committee with copies of those licenses.

42. I think it might be useful to have a specimen of them; those are the existing licenses, subject to the agreement which has been entered into?—Yes; they are described as "draft"; they are in blank, but they are actually the terms of the licenses, the names of the various companies being merely inserted in those blanks, so the Committee may assume that those are the actual terms, although the print is described to be a "draft."

43. And these licenses expire, you say, on the 31st December 1911?—Yes; that is so.

44. And are determinable at——?—They are determinable at six months' notice on the 31st December 1897, and the 31st December 1904.

45. But by notice of purchase by arbitration?—Quite so.

Mr. *Benn.*

46. Could you explain, in a sentence or two, the main difference between the Fawcett licenses and those which preceded them; that would help us, I think?—The main difference is this: What the honourable Member has described as the "Fawcett Licenses" were for the whole country. Each company holding a license was empowered by that license to carry on operations throughout the whole country (the United Kingdom of Great Britain and Ireland), and not merely within towns, but to connect towns together.

47. That authorised trunk wires practically?—Quite so.

48. That

Sir *Julian Goldsmid.*

48. That was in 1884, was it not?—That was in 1884, yes.

*Chairman.*

49. Can you say how many licenses had been given in that time, or how many licenses were in existence at that time?—Altogether, 23 licenses had been given, in this sense: the National Telephone Company had been authorised by separate legal documents to carry on exchanges in a number of different towns, but I am counting that all as one license, because it was to one company; the practice then was to enter into a separate agreement in respect of each town, so that you will kindly understand when I say "23," I am asking you to assume that I am not counting up the separate legal documents for every separate town.

Lord *Stanley.*

50. Twenty-three groups?—Yes, groups.

Mr. *Snape.*

51. Were these given in substitution of the old licenses, or how many were there of the old licenses for which new licenses were substituted?—At the time when the licenses of 1884 were given this number of 23 had been slightly reduced, by reason of amalgamations which had taken place at that time. I am sorry I do not at the moment remember exactly what the number was, but it was some number slightly less than 23; and to each of the persons or companies then holding licenses from the Post Office one of the new licenses (which Mr. Fawcett had explained to the House of Commons) was given.

*Chairman.*

52. That is to say, the restricted licenses were withdrawn?—Yes.

53. And in their place were given licenses extending over the whole of the United Kingdom?—Quite so; perhaps an illustration will show the thing better than anything.

54. Yes?—For Sheffield and Rotherham a Mr. Tasker held one of the old licenses to operate in those two towns; and Mr. Tasker, in 1884, in pursuance of Mr. Fawcett's policy, was given a license for the whole of the United Kingdom, in the terms that have been described.

Mr. *Grant Lawson.*

55. Do you know how many licenses there are now?—If the honourable Member will kindly refer to the drafts of the new agreements, which have been laid on the Table of the House, at page 21 he will find a list of 10 licenses which the National Telephone Company are to deliver up and surrender; and on page 54 he will find that there is one license mentioned which the New Telephone Company are to deliver up and surrender; that makes 11; and then the licenses of the two representative companies have to be added, which makes 13. So the answer to the honourable Member's question is, that at the present moment there are 13 licenses in existence; but, as a matter of fact, all the companies holding these licenses have been absorbed by either the National Telephone Company or the New Telephone Company, and, therefore, what are presented to us now are really only two companies, the "National" and the "New." I might, perhaps, further explain that the National Telephone Company hold nearly the whole of the shares in the New Telephone Company, which is now in process of liquidation, and that, therefore, for all practical purposes it may be assumed that there is only one telephone company in existence.

Mr. *Grant Lawson*—continued.

*Chairman.*

56. That was practically the state of affairs when the late Government, considering the whole question, developed the new policy which resulted in the agreement?—Yes, that is so.

Sir *James Fergusson.*

57. Except, that at that time the National had not acquired the shares in the New, had it?—I beg pardon, the Right Honourable Gentleman is quite right; and I am glad to have been corrected.

*Chairman.*

58. That fact would rather come afterwards; the absorption by the National of the New came after the change of policy, did it not?—Yes.

Sir *Julian Goldsmid.*

59. It is going on now, is it not?—Yes, it is.

60. It is a slow process?—Yes.

*Chairman.*

61. Now we will go to the time when the late Government began to develope their new policy, and perhaps you will state the reasons which, so far as you are aware, led to the Government considering the question of the agreement?—I believe that Her Majesty's late Government was led to consider the question of a fresh arrangement by the public dissatisfaction with the service which the telephone companies were rendering.

Sir *Charles Cameron.*

62. Perhaps I may ask you this to make it continuous: during Mr. Raikes' administration of the Post Office there was no great change in the policy which you have described, was there?—Well, trusting to memory, I think the only fact the Committee might wish me to mention is this: that when the United Telephone Company amalgamated with the National Telephone Company and the Lancashire and Cheshire Telephone Exchange Company, some concern was expressed in the House of Commons as to the result of this amalgamation, and Mr. Raikes caused a letter to be written to the companies, to say that he disapproved of their action.

*Chairman.*

63. With that exception, there was no great change in policy during the period that Mr. Raikes was at the Post Office?—No, I cannot remember any.

64. Then, you were telling us the reasons which led the late Government to consider the question?—I was saying that it was due, first of all, to public dissatisfaction with the service

*Chairman*—continued.

which the companies were rendering, and to the alarm of the public at the uncontrolled monopoly which was gradually being created. The Government were also influenced by the repeated demands of the companies for further powers to enable them to meet the public requirements; and again the Government were concerned at the effect which the competition of the telephone companies was having on the telegraph revenue.

65. Have you any figures you could give to the Committee upon that point?—The Government saw, for instance, that in six years the business of the companies had gone up; their gross revenue had gone up from about 261,000*l.* to about 465,000*l.*

66. Which six years were those?—From 1886 to 1891.

Sir *Julian Goldsmid.*

67. Is that over the same area, or over a larger area?—I am not quite sure whether I understand the honourable Member's question.

68. My question is whether the area of the business in the commencement of the six years was the same as at the end of the six years?—Yes; the business in 1886 was an all-England business, the change in the nature of the licenses having been made in 1884. While that increase was taking place in the business of the companies (which was 77 per cent.) the Government saw that the net telegraph revenue was going down. They saw that in the year to the 31st March 1889 there was a balance of revenue over expenditure in the telegraph business of the country of about 88,000*l.*, which, in the following year, decreased to 85,000*l.*, and in the next year to 68,000*l.*, and although they had not the complete accounts before them, they knew that in the year to the 31st March 1892 there was going to be a large deficiency instead of a balance; and, as a matter of fact, their anticipations were realised, for the balance of 68,000*l.* was converted into a deficiency of 90,000*l.*

69. You do not mean that you wish to induce the Committee to believe that that is to be put down to the telephones, do you?—Well, my own conviction is that it was very largely due to the telephones; it was also due partly to an increase in the pay of the telegraphists.

70. Is not there another reason, a very large extension of offices?—The extension of offices is made under a rule of the Treasury that in no case are you to make an extension unless you can show that the expenses will be covered by the receipts.

71. Oh, yes, I know that?—Or unless you get a guarantee from the neighbourhood to secure you against loss.

72. But it is not always observed, is it?—I think the only cases in which it has not been observed are a few in the Islands and Highlands of Scotland, where, owing to recommendations of Royal Commissions, certain public telegraphs have been given in the same way as harbours have been given.

73. And in Ireland?—Well, I am speaking only from memory, but I cannot at the moment charge my memory with any case in Ireland where it has been done, except in this way: There may have been, perhaps, one or two cases

Sir *Julian Goldsmid*—continued.

(I am sure they could not exceed one or two cases) in which it has been held that a telegraph extension was absolutely necessary for the administrative purposes of the Government, and the extension was given in the same way as a departmental telegraph would have been given; the only difference being that the public got the benefit of it, instead of its being absolutely confined to the administrative purposes of the Government.

*Chairman.*

74. Have you any figures showing the effect upon the number of messages sent?—In the years that I have mentioned, while the business of the company increased by 77 per cent., the ordinary inland messages of the department increased by only 44 per cent.

Captain *Bagot.*

75. Between 1886 and 1891 do you mean?—That is so.

*Chairman.*

76. And taking the figures up to the present time, up to the last completed year, how do they show?—Taking the figures to 1894, the revenue of the company was about 709,000*l.* (which is an increase over 1886 of 171 per cent.), and the ordinary public messages of the country were a little more than 58,000,000, which is an increase of only 50 per cent. over 1886; while if the Committee turn to the Parliamentary Account, they will see that the deficiency in the accounts of the telegraph service in the year to the 31st March 1894 had risen to 178,000*l.*, and it is estimated that in the year to the 31st March 1895 the deficiency will have increased to 240,000*l.*

77. And without attributing the whole of those differences to the telephone service, do you think it has to account for a substantial portion of it?—Yes, I am convinced that it does account for a very large portion. I quite admit that I could not claim that it accounted for the whole of it.

Sir *Julian Goldsmid.*

78. Would it be convenient to have a statement with regard to how this has risen; that is to say, how much the Post Office received now from the telephone. Can we have it as a separate figure?—The royalty in the year to the 31st December last (I am giving round figures) was 70,900*l.*

79. And six years before?—I beg the honourable Member's pardon, I have given that for a later date than he asked; I have given that for the 31st December 1894. In the year to the 31st December 1891 it was 46,500*l.*; then in 1886 it was 26,100*l.* I am giving round figures.

*Chairman.*

80. Was that for the year 1894?—The calendar year 1894. The years do not quite agree; the Parliamentary Account of the year is always to the 31st March.

81. Just to correct what I think is a mistake, you

*Chairman*—continued.

you mentioned a period of six years; it really is a period of five years, is it not: from the 31st December 1886 to the 31st December 1891 is a period of five years?—It is including both years; it is the year to the 31st December 1886 compared with the year to the 31st December 1891.

82. Quite so, that would make a period of six years?—Yes.

Mr. *Benn.*

83. You have said that when Mr. Raikes was at the Post Office, alarm was expressed at the uncontrolled monopoly which was being created by the buying up of the various companies. Can you tell the Committee what was the evidence showing that such alarm existed?—Questions were asked in the House of Commons.

84. And was it shown in any other way?—There were certain articles in the press.

*Chairman.*

85. You have mentioned the reasons which led the late Government to consider the advisability of developing a new policy. Will you now describe what course they took upon the matter?—First of all, they did not see their way to purchase the companies' undertakings at the end of the first period mentioned in the license, which was the 31st December 1890.

86. Had that policy been pressed upon them?—Well, that policy had certainly been presented to them.

87. But at that time it had not come before Parliament, the question of purchase, as it did in 1892?—No, it had not come before Parliament. In saying "pressed upon them," of course, I understand you to mean officially by the Postmaster General.

88. Then will you describe the decision the Government arrived at, and the action they took?—After a great deal of consideration, they adopted the policy which is set forth in the Treasury Minute laid on the Table of the House, on the 23rd May 1892. Their intention was to facilitate the operations of the companies, by conferring on them certain powers for constructing telegraphs which are enjoyed by the Postmaster General; secondly, to give additional facilities to the public by a closer combination of the telephone systems of the companies with the postal and telegraph systems of the Post Office; and thirdly, to safeguard the telegraph revenue by acquiring and working the trunk lines which connected local systems together. They also intended to extend the trunk wire system, so as to bring into communication the most distant places and enable conversations to be held even between Great Britain and Ireland, as had already been done between England and France. The right of the Post Office to establish telephone systems was fully reserved. Then a Bill was introduced to authorise the raising of the necessary sum of money to pay for the trunk wires which were to be acquired from the companies, and for the additional wires which were to be constructed by the Post Office. In this same Bill powers were sought for conferring on the companies, under due restrictions, certain powers of way-



*Chairman*—continued.

leave. The Bill was referred to a Select Committee in June 1892, and was reported to the House and became law as the Telegraph Act, 1892, 55 & 56 Vict. c. 59. I have copies of that Act if the Committee would like to have them.

89. I think the Committee have copies?—In reporting to the House the Committee expressed the opinion that the responsibility for the details of an agreement with the companies must rest with the Government. They made only one reservation, which was that the duration of the license should not be extended. Then, after considerable difficulty and a great deal of negotiation, an arrangement was made with the companies, and the heads of arrangement (which are with the print laid on the Table of the House) were signed on the 11th August 1892. Both these heads of arrangement and the drafts of the formal agreements to give effect to them, are set forth in the printed Papers which have been laid on the Table.

90. During that time what has the Department been doing with regard to trunk wires?—It has been proceeding with the erection of the trunk wires, for which part of the money provided by the Act of 1892 was given, and it has already expended a considerable sum of money upon these trunk wires.

Mr. *Benn.*

91. Can you tell us how much?—It has expended about 374,000*l.*

Lord *Stanley.*

92. In what period of time?—That, the honourable Member may take it, is up to the present time.

*Chairman.*

93. From August 1892, when the Act was passed?—Yes.

94. Perhaps you might shortly describe the trunk wires?—The Committee will no doubt kindly understand that the accounts have not been fully made up, and that the sum I have named must be taken as an approximate sum. The wires have been erected, not only in pursuance of the Act, but in pursuance of paragraphs 5, 6, and 17 of the Treasury Minute of May 1892. The Department has already completed a main line connecting Plymouth, Bristol, and the ports in South Wales with Birmingham, Leeds, and Newcastle-on-Tyne. It has also completed lines from Hull to Leeds, and from Leeds to Manchester and Liverpool; from London to Chelmsford, to Colchester, and to Ipswich; from London to Brighton; from Nottingham to Derby and Leicester; and from Edinburgh and Glasgow to Belfast and Dublin. Then lines to connect London with Bristol, Southampton, and Portsmouth are in hand, and a main line from London through Nottingham, Sheffield, and Leeds to Glasgow will, I expect, be completed early next month.

Sir *James Fergusson.*

95. There is a line belonging to the company from London to Glasgow now, is there not?—No; the company has a line from London

Sir *James Fergusson*—continued.

through Birmingham to Liverpool and Manchester.

96. Not to Glasgow?—Not to Glasgow. The communication which the Post Office is providing between London and Glasgow will be something entirely new.

*Chairman.*

97. And that line will give communication from London to Belfast and Dublin, will it not?—Belfast and Dublin as well as with Edinburgh.

98. And any other town which is in communication with Glasgow?—Yes, that is so; then, in addition to this main system, about 50 lines of minor importance have been constructed, or are in process of construction, in various parts of the country; I can give them to the Committee if they like, but they are of minor importance.

99. Oh no, that is not necessary?—I have now explained what has been described as the "backbone" system.

100. Have you got a chart showing the "backbone" system?—Yes (*the chart is handed in*).

101. I think now I will ask you to give a general description of the arrangements which will exist under the agreement with the telephone company?—I propose to refer to the various clauses in the new agreement. I will take first, Clause 2, Sub-sections 1 and 4, and the preamble in the middle of page 12: "On the 1st day of July 1895, or on such earlier day as may be fixed by agreement between the Postmaster General and the Company (which day is hereinafter referred to as 'the appointed day') the company shall deliver and hand over to the Postmaster General" these trunk wires (*see* Clause 2), and the Postmaster General will pay the purchase money which is now being ascertained by experts appointed by the Postmaster General and the company. The experts are mentioned in the preamble in the middle of page 12, beginning with the words: "And whereas the company's books." Then the operations of the company will be limited to the exchange areas specified in the 2nd schedule of the agreement, parts 1, 2, and 3; the schedule begins at page 22 of the print in the case of one company, *see* Clause 1, the paragraph beginning with "The expression, 'exchange area,'" near the bottom of page 13. Then the company are to construct connecting wires between their exchanges and post offices (Clause 5, Sub-sections 1 and 2), to enable the subscribers of the companies' exchanges to use the trunk wires of the Postmaster General (Clause 6, Sub-section 1), to enable them to transmit messages for any of the following purposes: (*a.*) For transmission over the postal telegraphs, and delivery as telegrams; (*b.*) For delivery as express letters; (*c.*) For conveyance and delivery as ordinary letters (Clause 6, Sub-section 2), and (*d.*) to summon a Post Office messenger (Clause 6, Sub-section 3). Then the Postmaster General is to make no charge to the company for working the wires between exchanges and post offices (Clause 9,

*Chairman*—continued.

Sub-section 2). I may explain here that in a few cases where such wires had been constructed for the mere purpose of enabling telegrams to be sent over the public wires, a charge was made to the company. This charge is now to be abandoned. The amount of the charge is about 1,600*l.* a year. To proceed with the explanation of what is to take place under the new arrangement: the Postmaster General is to authorise the company to exercise within any exchange area specified by the company all such powers of executing works (other than works under, in, upon, over, along, or across, any railway or canal) as are conferred upon the Postmaster General by the Telegraph Acts, 1863 and 1878, and by Section 2 (but not by any other section) of the Telegraph Act, 1892 (Clause 11, and the provisoes attached to that clause). Then the Postmaster General, if required by the company, is to provide underground wires between exchanges of the company situate in one and the same exchange area, on terms to be settled by mutual agreement. That is Clause 12. Then he is to allow the company to make agreements with railway and canal companies, over whose property he has exclusive rights of way, and for the construction by the Telephone Company of telephone lines, and he is to receive a merely nominal rental of a shilling per annum, instead of the charge of 20*s.* per mile, which he now makes (Clause 13, Sub-sections 1 and 2). This concession, I may explain, involves a reduction in the payments made by the company to the Department of about 2,400*l.* a year. Then the Postmaster General will continue the construction of the national system of trunk lines referred to in paragraphs 5, 6, and 17, of the Treasury Minute. I have already described what he has done up to the present time. Then the power of the Postmaster General to supply telephone exchanges, or to license others to supply them, is fully reserved (Clause 18). Unless the Committee wish to have some information about the powers of wayleave, I would sum up what I have been saying thus:—there will be a complete national system of telephonic communication throughout Great Britain, and between Great Britain and Ireland, and there will be placed at the disposal of the public facilities not merely for telephonic inter-communication, but for a combination of the telephone service with the telegraph and postal service of the State.

102. That is to say, the inter-communication will be in the hands and under the control of the Post Office, and the development of the local exchanges will be in the hands of the company?—Yes; that is so.

103. And, no doubt, the taking over of the trunk wires by the State is a step in the direction of State acquisition of the telephones?—Yes; I think that is obvious.

104. I should like to know your opinion shortly (perhaps we shall have an opportunity of hearing more from you afterwards) upon the question of competition in the telephone service, the effect of competition upon an effective service?—I believe that both reason and experience point to the necessity for only one exchange system in one area

*Chairman*—continued.

area; as a matter of fact, every competing company that has been established has been absorbed by some existing company, and it appears to me obvious that if you look for efficiency and economy you must have only one system in one area. Otherwise, if the users of the telephone are divided into two groups, the persons in one group cannot communicate with those in the other, unless they pay to both exchange systems.

105. You say experience shows that where there are two competing systems, one is inevitably absorbed by the other; you are not now merely referring to the absorption of the "New" by the "National," but experience gained in the old system, is that so?—Yes; I can also refer to a case in a country which has been very often mentioned, that is Sweden. The inconvenience of having two competing companies in Stockholm was so great that the Municipality of Stockholm brought all their influence to bear upon those two companies to combine. That is an illustration.

106. Then, I gather that the experience gained from foreign countries bears out the experience which the Department has gained from the past history of the telephone service in this country?—Yes; and I believe that there is absolutely no difference of opinion amongst experts, that competing systems within one area must result in inconvenience to the public, and expense, and want of efficiency.

Mr. *Snape.*

107. Then, is it your view that where the National Telephone Company at present has a local exchange, it would be undesirable for the State to introduce, or for the municipality to introduce, a competing system in that locality?—Well, of course, the evidence I give is scarcely evidence from the point of view of general policy. I think the Postmaster General (the Chairman of the Committee) wished merely to get my opinion on the broad question of competition. The case is quite different from the case of railway facilities. If there are competitive lines to a given town, the public can choose which line they will use, and when they choose their line they only pay for travelling on that line; but when there are competitive systems of telephones within one and the same area, if a member of the public chooses one of these systems, he cannot get all the facilities he requires, because he finds some of the people he wishes to speak to are on the other system Then he has to do what he is not required to do on competitive railways, he has to pay for both systems in order to get the facility that he requires.

Captain *Bagot.*

108. Would not the public always use the cheapest system, if there were two, and so the competition drive the other company out of the place altogether?—Well, I think the honourable Member, if I may say so, has almost supported my contention, because he contemplates one being driven out by the other; and that has been the result.

109. For the benefit of the public?—By the action of the public.

Captain *Bagot*—continued.

110. Supposing there were two exchanges, and one exchange was run on a cheaper system than the other, it would get most subscribers and, in time, all the subscribers?—That might be so.

111. And the other one would fail?—Yes.

Sir *Julian Goldsmid.*

112. Is it not this, they either agree as to price or the one drives the other out?—I think that would very likely be the case.

Mr. *Snape.*

113. Has it not been rather the other way, that some of the companies starting on a cheaper system, have been absorbed by the National Telephone Company, who charge higher rates. Are there not such instances?—I know one very striking case of the kind at Dundee, where a local company was established charging to the public I think only 5*l.* a year, and that local company was absorbed by a company which charged higher rates. The honourable Member is quite right.

Captain *Bagot.*

114. The dearer company bought up the cheaper company, because they were afraid of the competition. They might pay any price for them?—I am afraid I do not know all the intricacies or secrets of the transaction. The fact is that the company charging the higher rates did absorb the company charging the lower.

Mr. *Grant Lawson.*

115. I want to ask a question about the loss on the telegraphs. I suppose the telephones extended in some parts of the country much more than they did in others; do you know whether the loss to the telegraph department is greater in those parts where there were more telephones?—Yes, we had returns kept in some cases of the kind the honourable Member suggests; for instance, as between Liverpool and Manchester and between Glasgow and Greenock; and we found that as between Liverpool and Manchester (where there is constant communication in the way of business, and where, therefore, the rate of increase in telegrams ought to have been above the average) the rate of increase (I admit) that there was an increase) was very much lower than the average for the whole country; and in the case of Glasgow and Greenock we found that the telegraph business between these towns was practically annihilated.

116. Was there a great telephone communication between those towns?—Yes.

Lord *Stanley.*

117. Competing lines?—They were entirely in the hands of the National Company.

Mr. *Tully.*

118. You said in your evidence as to the history of this business, that the original companies got the whole of the original patents?—Yes.

119. The competing companies then have been all absorbed by one company?—That is so, nearly; as I explained, there is the New Telephone Company still in separate existence, but in process of absorption.

Mr. *Tully*—continued.

120. Then with regard to the telegraph service, in 1891 I think you stated that the revenue had an excess over expenditure of 68,000*l.* ?—That is so, an excess of revenue towards payment of interest.

121. Of 68,000*l.*?—Yes.

122. At present the telegraph system is working at a loss of 240,000*l.* ?—That is so ; that is the estimated amount ; the accounts are not closed yet.

123. You attribute this loss on the telegraph service to the existence of the telephone service? —Only partly.

124. You said largely, I think?—Yes, largely.

125. So it would appear that these companies first began by getting hold of the patents to cripple the efficiency of the Post Office service ; the original service in the early days?—The honourable Member must excuse me if I do not answer as to the object of the company.

126. I ask you what happened ; they originally got hold of the patents?—That is so.

127. Then they got rid of the competing companies by absorbing them?—That is so.

128. The telegraph service brought in a surplus of 68,000*l.* in 1891, and is now working at a loss of 240,000*l.* ?—That is so.

129. And you attribute that largely to the existence of those telephone companies?—I do.

130. Were those trunk lines you speak of (that are mentioned on that chart) erected by the Post Office ?—Yes, all the trunk lines which are shown on the map which the honourable Member has seen are erected, or are being erected, by the Post Office.

131. So that really the effect of the telephone service of these companies, as regards the general taxpayer, is that the service which gave a surplus of 68,000*l.* in 1891, is now being worked at a loss of 240,000*l.* ; that is the general effect, is it not?—I think I rather said, the existence of the telephone companies has contributed to that result.

Sir *Julian Goldsmid.*

132. I want to ask you a question or two about that. I remember cross-examining Mr. Patey on this subject a great many years ago ; I will just ask you this : Is not it true that all extensions are charged to revenue account every year, and that you have no separate capital account? —Yes, that is true.

133. A private company, if it did the telegraph business of the country, would have a capital account and bring in new capital for these extensions?—That is so.

134. Whereas you charge it to revenue, and then you tell us that the thing does not pay, because all your extensions have come out of revenue?—That is so ; but may I reply to the honourable Member, that it has always been the case.

135. I am perfectly well aware of that, I moved for the Telegraph Committee of 1875 ; I have gone through all this before?—In replying to the honourable Member my point is that what he says does not affect the question of the effect of the telephone companies on the telegraph revenue because, as the practice has always been the same, the comparison between one year and another holds good.

Sir *Julian Goldsmid*—continued.

136. Well, we will come to that in a moment ; you agree with me in wishing the Committee to understand that when you say that there is a loss, it is after you have provided all the money which is necessary for extensions in the year out of the revenue of the year?—That is so.

137. Now, just tell me this, for instance ; last year what was the total amount you spent on extensions?—About twenty thousand pounds.

138. I do not mean only telephone extensions, but telegraph extensions too?—I am afraid I have not got the accounts ; I can only say from memory what it is.

139. Telegraph and telephone, both?—May I explain to the honourable Member that those telephone extensions which are described in the map which the Committee have seen are being carried out out of capital, the capital provided by the Act of 1892.

140. Oh, they are, are they?—Yes.

141. How much was provided by the Act of 1892?—One million pounds.

142. That is being still applied in that way?— We are still drawing on that sum of 1,000,000*l*

143. All the telegraph extensions are charged to income?—That is so ; it appears on the Votes in the same way as salaries.

144. The next point I want to come to is this : will you kindly tell me what is the difference between the wages of the staff of the Post Office, say last year, as compared with 10 years ago?— I can get that information ; I have not got it at present.

145. It is very material, is it not?—Certainly, I quite admit that.

146. There has been an enormous increase, has not there?—There has.

147. Both in the numbers and in the pay?— That is so.

148. I do not wish to quarrel with it, I am merely stating a fact?—Yes.

149. You will kindly give the Committee figures, will you, showing last year, as compared with 10 years ago ; I do not want you to work that out now, but you will put it in later?—Yes.

150. Then, of course, this, too, would go in reduction of the loss upon what you call the telegraph revenue?—Certainly.

151. In addition to that, are there no other causes ; cannot you think of some other causes? —No ; I must say to the honourable Member that I cannot think of any other cause.

152. For instance, you have not known that, in years of great commercial depression, there is a great cessation in the increase of telegraphy, whereas in years of rapid increase of prosperisy, there is a much larger increase?—I think there would be very much in that, but it seems to me that if we look to the affairs of the company that must equally have applied to them.

153. You are speaking of telephones, I am speaking of telegraphs. You gave us figures which applied to the telegraphs as well as telephones?—Yes ; I think I quite understand the honourable Member, but if he would allow me, what I should like to point out is this, that if the commercial depression has affected the telegraphs, it must have affected the telephones ; therefore the comparison between the two holds good, notwithstanding the commercial depression.

154. May

Sir *Julian Goldsmid*—continued.

154. May I point out to you this: of course, in a great many places there was not sufficient trunk lines up to a very short time ago; you tell us you are providing them now,—the consequence was that people could not telephone as they would, in place of telegraphing, because the communication by trunk lines was incomplete?—That is so.

155. Consequently, there might be a very considerable tendency for business people to increase the amount of their telephonic communication and to diminish the amount of their telegraphic communication?—Quite so.

156. And what the Post Office would gain by that would be the net payment which is made by the company to the Department by way of royalty?—That is so.

157. And, as far as it goes, therefore, whatever additional profit the company made would be more or less in proportion to the increased royalty paid to the Department?—That is so; but I am afraid I cannot admit that any increase in the payment of royalty to the Post Office compensates for the loss of telegraphic business between places like Manchester and Liverpool.

158. I want to see if I can convey to your mind, by my questions, this fact: I believe business men very much prefer to communicate by telephone when they can do so rapidly, rather than by telegraph, because they can get their answer at once; what I want to ask you is this: whether you do not think, in common with the American experience, that the tendency to increase communication and facilities for telephonic work naturally causes a decrease in telegraphic work?—I quite agree; that is my position.

159. But that does not mean, of course, as far it goes, that the business is better, or worse; all it means is that the telephonic communication is better?—I am quite prepared to accept it in the way the honourable Member puts it.

Captain *Bagot.*

160. Was there supposed to be a loss or a profit to the Telegraph Department when the sixpenny telegrams were introduced?—Immediately before the sixpenny telegrams were introduced we not only paid our way, but we were within a few pounds of paying interest on capital.

161. After the sixpenny telegrams were introduced there was a loss?—Yes.

162. In what year were they introduced?—They were introduced in October 1885.

163. Then that was just before this loss to the Telegraph Department began, was it not?—I rather purposely took the year 1886 in speaking of the number of inland telegrams, because it was then that we had the lower rate in full operation; I thought a comparison could not fairly be made with the time previous to that.

*Chairman.*

164. But subsequently to the introduction of the sixpenny telegrams, the Telegraph Department has paid, that is to say, there has been a balance of receipts over expenditure for three years, has there not, 1888, 1889, and 1890?—That is so.

Captain *Bagot.*

165. Then you do not take the sixpenny telegrams into account in regard to this deficiency?—If the honourable Member will allow me, I would say I took a period so much in advance of the introduction of the sixpenny telegram as to practically exclude them; when I mentioned the balance of revenue available towards payment of interest I began with the year to the 31st March 1889, and in that year it was 88,000*l.*, then it decreased to 85,000*l.*, then to 68,000*l.*

166. So you think that the deficiency is not in any way due to that, but very largely to the increase of the telephonic communication?—From that time?

167. Yes?—Of course, if the honourable Member went back to the year immediately following, or about the time of, the introduction of the sixpenny telegram, I would at once admit that the introduction of the sixpenny telegrams caused a very great loss of net revenue.

Mr. *Benn.*

168. You described the policy of Mr. Fawcett to the Committee; would it be fair to describe that policy as free trade in telephones?—Yes, I think that correctly describes it.

169. Then may I take it that the present policy of the Post Office is a distinct reversal of that position?—I think I have rather guarded myself against describing policy, or expressing an opinion on policy; I have rather limited myself to expressing my own opinion on the broad question whether competition is for the benefit of the public.

170. Yes, but the Postmaster General asked you a very important question on that matter of policy, so I ventured to put these questions. Now can you point to any period when Parliament authorised the reversal of that policy, or can you point to any document which would show that?—I do not know that I can point to any. I do not know that the question has been directly presented to Parliament.

171. May I ask you whether you regard the Treasury Minute, with which you are familiar, as a reversal, it may be a modification; but would you regard that as a modification of Mr. Fawcett's policy?—It was a reversal clearly in this sense: that the companies who, under Mr. Fawcett's policy, were to have freedom to exercise their operations throughout the United Kingdom were to be limited to areas; and also (now that the honourable Member reminds me) there is a decided expression in that Treasury Minute against the granting of licences to any persons who might apply for them.

172. "Not financially sound," I think that is it?—Yes, I think so.

173. But with the exception of that reservation, may I take it, referring to paragraph 21 of that Minute, that there is nothing in the document which would discourage sound competition?—No; I think it is clear that in that clause possible competition was contemplated.

174. Then the objection to competition and the decision of the Post Office up to the present time to discourage or to refuse municipal authorities licences is a policy which is the outcome rather of the Post Office Department than

Mr. *Benn*—continued.

than of any expression from Parliament?—Well, I think I can answer the honourable Member so far as to say that I am not aware of any expression of Parliament contrary to competition—I am not aware of any expression in Parliament contrary to competition.

175. Then coming to the Heads of Arrangement. When these Heads of Arrangement were entered into it was in full view of competition?—At that point I think there must be some reservation.

176. Why?—Because the Committee which sat on this question in 1892 left the responsibility with the Government of the day to carry out an arrangement with the companies to give effect to the Act. In the course of the negotiations the difficulties connected with competitive companies made themselves very much felt, and I do not think the honourable Member would be right in assuming that when these Heads of Arrangement were signed there was any contemplation of competition.

177. But you remember that the Heads of Arrangement were signed between two companies (two financially sound companies) prepared to compete with each other, and that the tariff of the one company was lower than the other, and the system, I think I may say, certainly better?—I do not know whether the honourable Member wishes me to express an opinion on the relative merits of the systems of these companies.

178. No, I will withdraw that observation; my present point is this: those Heads of Arrangement were made in full view of two companies, and a prospect of competition for the protection of the public?—Well, I think I must say to the honourable Member that neither of these companies would accept the arrangement of the Government until they both of them came to some understanding; therefore, in that understanding, there was something opposed to the idea of competition, although the two separate agreements were signed.

179. True; but the New Company was not absorbed by the National until after a settlement of those Heads of Arrangement?—That is so; but, nevertheless, the arrangement, or rather understanding, was arrived at between these two companies before the Heads of Arrangement were signed.

180. Am I to take it, then, that the Post Office was a party to some secret arrangement whereby, after the signing of those documents, one company was to be absorbed by another?—No, certainly not.

181. Then, is it fair to say that when this document was signed it was in full view of competition between two financially sound companies?—The honourable Member must kindly take the information that I have given him, that the Post Office was aware of an understanding having been arrived at, and that the two companies were not prepared to enter into this arrangement until they had arrived at an understanding.

182. Arrived at an understanding that one was to be absorbed by the other?—I am not prepared to say that it went that length, but I think my reference to an understanding is sufficient to suggest that it was not an understanding under which they would actively compete with each other.

183. If that was so, do not you think that in making an arrangement or agreement in such a case, practically authorising and encouraging a monopoly, it was necessary that this agreement should contain similar provisions to those which obtain with regard to other monopolies where companies, say gas or water?—I would remind the honourable Member that this was not the licence to the companies; they already held their licence for the whole country; what was in contemplation was rather a restriction of that licence. The honourable Member will, perhaps, kindly bear in mind that there was not a clear board on which we could approach people for the first time to make arrangements with them of the kind that he suggests; we were already dealing with people who held licences which gave them the power of carrying on telephone business throughout the whole country.

184. Yes, I am aware that their two licences did not expire until 1911, but I think I may take it from you that, so far as the patents were concerned, they were all at the disposal of anybody who liked to use them?—That is so; they had expired.

185. So that further than holding this licence to carry on their business, they had no advantage over any other competitor?—Except that they held the field.

186. Except that they held the field?—Not merely by their licences, but by their works, by their business.

187. With regard to the two companies in existence at the time of the signing of this agreement, you are aware, of course, that the tariff of the New Telephone Company was lower than the National?—Yes, I am aware of that.

188. You are aware that dissatisfaction with the National was so great that in a very short space of time, notwithstanding the inconvenience of competition, the New succeeded in getting in London a very large number of subscribers?—I am not aware that those subscribers were ever served.

189. No, that may be, because that would involve the completion of the enterprise; but within a very short space of time they secured several thousands, I believe, of subscribers?—I believe that is so; I am also aware that the chairman of the company came to the conclusion that his charges were too low, and that he intended to raise them; he told me so himself.

Sir *Charles Cameron.*

190. Are you aware that the New Company had a contract with the Telephone Users Defence Association (which was published in their prospectus) by which they undertook to supply them with telephonic communication at a given rate?—I believe that is so; and the contract in regard to these particular people would no doubt have had to be carried out. When I say that their chairman came to the conclusion that his rates were too low, of course if he proposed to charge higher rates it could only have been in regard to additional people, people who came on in excess of the number that you refer to.

191. Then

Mr. *Benn.*

191. Then do I understand that if the Post Office had been dealing with a single company, practically a monopoly, they would have offered the same facilities and practically the same agreement as that which was offered to the two companies?—Certainly. It was an offer in restriction of the powers of the company.

192. You have referred to Stockholm, as showing that where two companies exist the municipality does, in some cases, use some effort to make the two companies one?—Yes

193. Can you give the Committee any information about the charges in Stockholm, as compared with the proposed charges of the National Telephone Company?—Yes, I think I can. In Stockholm the charge is 5*l.* 4*s.* a year.

194. £.5 4*s.* a year to each subscriber?—Yes; there are also, I ought to say, some arrangements for a different system of charge based on the number of conversations; but a charge of 5*l.* 4*s.* a year may, I believe, be taken broadly as the charge. In addition to that, the sum of 2*l.* 12*s.* is charged in the first instance towards the cost of construction; that is what I understand is the charge.

Mr. *Snape.*

195. Is that the charge after amalgamation, or before?—I must make a correction; it has just been pointed out to me, that when I spoke of Stockholm before, I ought to have spoken of Christiania; the rates I have just given are in respect to Stockholm (5*l.* 4*s.* a year), but when I spoke before of the two companies (I am sorry I made the mistake), I ought to have spoken of Christiania. It is there that there were two companies which the municipality persuaded to amalgamate.

Mr. *Benn.*

196. And what were the charges there?—4*l.* 3*s.* 4*d.* a year.

Mr. *Snape.*

197. Was that the charge after amalgamation, or before?—I am sorry to say I have not got that information.

Mr. *Benn.*

198. The advantage given under this agreement will, I think, be very considerable to the companies (or rather now the company) concerned?—Certainly.

199. Will it put the company practically on its legs again?—Well, I think I would rather not answer that question of the honourable Member, if the honourable Member will allow me not to do so.

200. Before passing to that, I forgot to ask you a moment or two ago, it is my fault entirely, to compare the prices of Stockholm with the prices of the National Telephone Company?—The charges of the company in the metropolitan area (which covers 630 square miles, and includes places like Dartford, Richmond, Epping, and Hampton Court), are as follows: On a five years' agreement, the first wire 17*l.* a year, additional wires 12*l.* 15*s.* a year, private houses 10*l.* a year.

Mr. *Benn*—continued.

201. Private houses; what would be the nature of that service?—Of course, I am speaking about a business that I am not intimately acquainted with, but I understand that a person, say, living at the West End, and wishing to be connected with a local exchange there, chiefly, probably, for speaking to tradesmen and to his neighbours, will be charged 10*l.* a year; but I understand that while he only pays 10*l.* a year, he can speak to anyone within the whole area for that rate as a private person; not as a business man.

202. Taking the Stockholm figure (which I take to be a business figure) of 5*l.* 4*s.*; can you give us the National Telephone figure, as compared with that?—17*l.*

203. More than three times the amount?—Yes.

Sir *James Fergusson.*

204. To make that complete, can you give us the number of subscribers on the Stockholm Exchange, of which the subscription is 5*l.* 4*s.*?—I am sorry I have not got it for Stockholm, but I can give it for Christiania, in regard to which I mentioned 4*l.* 3*s.* 4*d.*

205. Yes, that will do?—The number of subscribers in Christiania, according to our latest information, is 3,300, out of a population of 152,000.

Sir *Julian Goldsmid.*

206. And the area covered is what?—I am afraid I cannot, myself, answer the honourable Member as to the area in Christiania. It is stated in a Return to be a radius of a mile.

207. Only one mile?—A radius of a mile.

Sir *James Fergusson.*

208. I want to know also what number of subscribers that is compared with; what number of subscribers would be supplied for a subscription of 17*l.* 10*s.* in London?—I am afraid I cannot give that.

209. I ought not to interpose just now, but is the essence of the matter not this, that the expense increases with the number of subscribers?—Enormously. May I make this suggestion: that the Committee might wish at some stage to call representatives of the company to give evidence on these matters.

Mr. *Benn.*

210. I should like, in comparison to these figures at Christiania, to have, if you could give us, similar figures with regard to the number of subscribers in London, and the population, that will be an important comparison?—The number of subscribers in London is 9,000, out of a population of four millions and a quarter.

211. Then the proportion of telephone users in Christiania, as compared with London, is what? It is much greater.

212. The number is very much greater there?—Yes.

Mr. *Snape*

213. Before passing from Christiania, can we have furnished, at a future meeting of the Committee,

Mr. *Snape*—continued.

mittee, the information I asked for a little time ago, as to the number of subscribers in each of the companies before the amalgamation, and the charge made by each of the companies before the amalgamation at Christiania?—I will try and get it, certainly.

Mr. *Benn.*

214. You are aware that London commands one-seventh of the telephone business of the country probably?—I know it is very large; I do not know the exact proportion.

215. Have you any particulars as to how much of the business of London has to do with the trunk wires which are to be taken over by the Post Office?—I do not think that at present the business in London has very much to do with the trunk wires, because the trunk wires supplied by the company have rather been between provincial towns themselves, than between provincial towns and London. The company has provided a line of communication from London through Birmingham to Liverpool and Manchester; that is one of the later lines of communication, and I believe it is considerably used; but in the provinces they have supplied very large numbers of trunk wires between neighbouring towns (as between Manchester and Liverpool), and it is in those directions that the bulk of their trunk wire business lies.

216. Supposing at the present moment the local telephone business of London (which has nothing to do with your trunk wires) is taken as 90 per cent. of the business (I think that is probably a fair figure), and that that could be done at the same rate as at Stockholm, without any reference to your trunk wires, do not you think it is a little hard on London that, for the convenience of this connection of trunk wires, and the proposed arrangement, it should be called upon to pay a tariff of 17*l.* 10*s.* instead of 5*l.* a year for 90 per cent. of the business which concerns London only?—I am absolutely certain that the business could not be done in London at the rate that is charged in Stockholm or Christiania.

217. Let us put it at a higher rate. You are probably aware that one of the reasons why the tariff which you quote is so high is that provision has to be made to pay interest upon what might be described as watered capital, obsolete plant, and other items of that class?—I do not remember having said that. No doubt, of course, you must provide interest on your capital; but I think if the honourable Member went into the expenses he would find that those expenses which had to do with the working of the system, with its maintenance, with the working of the switch-boards, and with the cost of wayleave, and other expenses of that kind—current expenses—I think he would find that those expenses far exceed anything that might have to be provided by way of interest upon capital.

218. But supposing it could be shown, and the citizens of London were prepared to make the experiment, that the telephone business of London could be conducted for, say, half the tariff of the National Telephone Company, what would be your view in that case: do not you think it is a great hardship that they should not

Mr. *Benn*—continued.

be allowed to do it?—I am afraid I am rather being put into the position of an advocate for the company; a position which I do not altogether care to occupy.

219. I think, perhaps, you might answer this point. The Postmaster General asked you this question: whether you did not consider that the acquisition of the trunk wires was a step, an important step I think he said, in the direction of State acquisition of the telephones?—That is so.

220. You have admitted, I think, that this arrangement would very largely improve the property of the telephone company concerned?—I do not think I have admitted that.

221. Do you mean to say you do not think that this arrangement benefits the National Telephone Company?—I certainly do think it benefits the National Telephone Company; in this way, that it enables them to place at the disposal of their subscribers facilities which have not been previously placed at their disposal, and it relieves the National Telephone Company of certain payments, of a certain amount which I have mentioned, which they have hitherto made to the Post Office. I think those are the advantages, as far as I remember them at the moment, which it confers on the National Telephone Company; and it also confers on them certain powers in respect of wayleave which they have not had before. On the other hand, it takes away from the company the power of doing a business which they have hitherto done, the trunk wire business of the country.

*Chairman.*

222. Does it not also enable them to concentrate all their energies and their more or less limited capital upon the development of the telephone system in various areas?—That is so.

223. Which is a great advantage to them and to the public, is it not?—Yes.

Mr. *Benn.*

224. Looking at it in a financial point of view, placing the clerks of the Post Office at the disposal of the telephone company, and the powers of the Post Office over the streets, without troubling the company to come to Parliament for express powers in that direction, and other advantages, do not you think it is an immense advantage to this companies to be placed under this arrangement?—I think it is a decided advantage.

225. You have heard it described as a considerable advantage in the meetings of the companies concerned, have you not; you remember the statement of the chairman of the New Telephone Company, probably, and his description of the vista of profit?—I do not remember that.

226. For instance, I will take your reference to the fact that the companies had lost the power, or would lose the power, over their trunk wires; have you any separate figures showing what the companies made out of their trunk wires?—According to the information I have received from the company, their receipts in respect of trunk wires for the year to the 31st December 1894 were about 76,000*l.*

227. That was for how many years?—For one year.

228. For

Mr. *Benn*—continued.

228. For one year?—For the year ended 31st December 1894.

229. Are you able to place against that item the expenses, the capital charge, and the working expenses?—I believe, in reckoning their capital charge, the value (which, however, naturally, I cannot admit, seeing that I am now engaged with the experts of the Post Office in going into the question) that the company assign to these wires is about 490,000*l.*

230. May I take it that the trunk wire portion of their undertaking is the least profitable?—Well, it would be rather difficult for me to give an opinion without an examination of their books, which I have not had an opportunity of conducting. Of course, I can say very readily that, while as between places like Manchester and Liverpool, I have no doubt the trunk wires are paying very well indeed, I should expect that, perhaps, in some other cases, they do not pay so well.

231. Would you be prepared to say that the companies are very glad to get rid of their trunk wires?—I know that extreme difficulty was encountered in persuading them. I think the right honourable gentleman, the late Postmaster General, will fully support me in that.

232. Admitting that this agreement does benefit the company, and put it in a better financial position, is it not fair to say that when the time comes for purchase, regarding it as a step in the direction of the State acquisition of the telephones, very likely the Government of the day will have to pay a large sum for the repurchase of the facilities which are now given?—I think the honourable Member will see that the question he has now put justifies my reticence, because I think it is one of the last things I should like to admit in such an event as he suggests. May I say, before the honourable Member leaves this question, that in answering a previous question, I omitted to point out this fact,—that any wayleave powers conferred on the company are not to be taken into account on a purchase. If the honourable Member will refer to Clause 17, Sub-section 3, in the print, at page 20, he will see this, "The benefit of the covenants herein contained with reference to the execution of works by the company or by the Postmaster-General for the purposes of the company shall not be deemed to be property of the company for the purpose of such purchase."

233. My point was this, that the powers of the Post Office to invest the company with the same powers was a very great advantage to the company, and gets over one of the great difficulties that they have had to contend with for a very long time, and was a great financial benefit to them?—No doubt.

234. But on this point, might I describe the present policy of the Post Office as a policy which is intended to save the telegraph revenue; the result of which may be, that the public must pay more for its telephone service?—I do not think it can be correctly described in that way; I think it is clear, that under this arrangement, the Post Office is entering into a business which will place additional facilities at the disposal of the public in connection with the local telephone service, and will also place at the disposal of the public the facility of communicating between towns which the company had it not in contemplation to give (as for instance between such distant places as London and Belfast), and that the Post Office is doing this in a way certainly to safeguard its revenue, but not to safeguard the revenue specifically derived from telegrams. Of course, in giving all these facilities, and in providing these trunk wires, no doubt it is providing facilities which will affect the revenue derived from telegrams; but then the revenue derived from these new arrangements will come to the Post Office, and therefore the revenue of the Post Office will be safeguarded, although not the revenue derived from telegrams.

Mr. *Benn*—continued.

235. You are aware that the charges, taking the nearer towns (within a hundred or 150 miles round London, for example), under this new arrangement, are considerably increased, as compared with those which obtained, under the tariff of the National Telephone Company?—I think that there, there is perhaps a little misapprehension. In some cases, as regards towns that are very close together (or fairly close together) the Post Office charge will be higher; but perhaps the honourable Member will allow me to state what the scale of the company is, as compared with the scale of the Post Office. The scale of the company, is 3*d.* for the first 25 miles; 6*d.* for 50 miles; 9*d.* for 75 miles; a shilling for a hundred miles; 1*s.* 6*d.* for 125 miles; 2*s.* for 150 miles; half-a crown for 175 miles, and 3*s.* for 200 miles. Now, in connection with the last charge, I may mention, by way of example, that the company's charge between London and Liverpool is 3*s.*, and the charge of the Post Office will be only half-a-crown. The scale of the Post Office is 3*d.* for any distance not exceeding 20 miles; 6*d.* for any distance not exceeding 40 miles, and 6*d.* for every additional 40 miles.

236. Taking the distances of towns up to 100 miles, (and I think I am fair in assuming that the business done with the nearer towns is considerably more than that done by the more distant towns) would you be prepared to tell the Committee, that the increased charge is not more than 20 per cent.?—If the honourable Member is referring to towns that are reached from London, I think I am able to assert that the Post Office will put towns into communication with London that have not been put into communication hitherto, and that therefore the difference in charge will not appear; the company have only, I think, within that distance hitherto served Brighton and Birmingham, and perhaps a few others.

Sir *Julian Goldsmid.*

237. And Dover?—Well, I am afraid I cannot give that.

Mr. *Benn.*

238. Can you give us a typical example, say Northampton, for instance, to show much extra we shall have to pay?—Yes.

239. Any one will do?—Nottingham is a little too far for the honourable Member's question, is not it?

 240. I prefer

Mr. *Benn*—continued.

240. I prefer the nearer distance?—I can give Folkestone.

241. I will not press this question?—I am sorry I have not got it in the direction the honourable Member suggests; but I happen to have got the kind of information for Edinburgh, and also for Glasgow.

242. Yes, that would show the advantage probably?—No, it does not show an advantage.

243. I thought you meant from London to Glasgow?—No, if it would serve the honourable Member's purpose, I could give him some examples, which would of course apply equally, if I had the information for the south of England, always with the qualification that the companies have done comparatively little in the south of England from London; therefore, the public, when we supply our trunk wires will get an advantage in that way.

244. They will get communication, but at a higher tariff than that which previously obtained?—If the honourable Member will pardon me, the lower tariff would not have obtained in certain cases, because the communication was not there.

245. But still, I suppose it was within the range of possibility that the company might have put it there instead of the Post Office?—True; I find that from Edinburgh to Aberdeen, which is 106 miles, the Post Office charge would be 1*s.* 6*d*, and the company's actual charge is 2*s.*

246. What is the meaning of "actual charge;" has that anything to do with terminals?—No; I, perhaps, emphasised that word too much, but I think I may say that in some cases they do not appear to adhere strictly to their scale; there may be explanations for that which I am not able to give; for instance, if they cross a very wide estuary, or something of that sort, they may consider that they are justified in charging for the additional cost of the cable. Perhaps I ought not to have emphasised the word "actual" so much, but that is what I meant. I find from Edinburgh to Airdrie, which is 31 miles, the company's charge is 6*d.*, and our charge will be 6*d.*; to Alexandria the charge of the company is 9*d.*, and our charge will be 1*s.*; to Alloa both charges are 6*d.*; to Annan their charge is 9*d.*, and our charge is 1*s.*; to Arbroath both charges are 1*s.*; to Bathgate both charges are 3*d.*

247. I do not think I need pursue that?—I can give the honourable Member the average result of the rates between Edinburgh and about 75 towns. The average rates between Edinburgh and 75 towns in Scotland, under the Post Office rate, would be 8·06*d.*, and the average rate under the company's rate is 7·86*d.*

248. That is, of course, rather a misleading figure, because that would very largely depend upon the number of messages?—It is simply the average of rates, aud not the average of the user.

249. That does not help one much, because it would be necessary to take out the total of the rates, and work out the sum total in that way?—Yes, that may be.

Sir *Charles Cameron.*

250. I understood from what you said as to the effect of a secret understanding having been

Sir *Charles Cameron*—continued.

arrived at by the New Telephone Company and the National Telephone Company while they were conducting their negotiations with the Post Office, that you considered that the agreement in some way shut out competition, or that it was intended to shut out competition; is that so?—I should not like to put it quite so strongly as that; I would rather put it as tending against competition, not as shutting it out.

251. What I wish to prove is that it contemplated competition and made provisions for competition?—Yes.

252. And with a view of showing how far you are right or how far you are wrong, would you please read to the Committee the clause from the agreement which we have here, which you will find on page 50, section 8, sub-section 2?—Does the honourable Member wish me to read it?

253. Yes, I want to refer to two or three passages in the agreement which show that competition was contemplated?—"Where a telephonic message is transmitted over the trunk wires of the Postmaster General, between an office on an exchange of the Company and an office on an exchange of some licensee of the Postmaster General other than the Company."

254. That will do; does not that show that competition was contemplated?—I think that shows that the negotiators for the Post Office carefully reserved the right of the Postmaster General to grant licences, which was reserved throughout the whole of the negotiations.

255. Therefore we who get our information regarding the agreement from the agreement itself, must assume that the Post Office conducted the negotiations for that agreement having constantly in view the reservation of competition?—I think the insertion of this provision in the agreement shows that the Post Office was carefully reserving the rights of the Postmaster General. On the other hand I think it shows that the companies feared that the Postmaster General might exercise his rights, and therefore they wanted some protection against the possible competition of rivals. But, Sir, the fact that the companies feared competition, and the fact that the Post Office fully reserved the Postmaster General's rights, cannot affect the other fact that these two companies, before they could be brought to an agreement with the Post Office, actually did come to an understanding, an understanding in my opinion clearly tending to the concentration of the business of two companies in the hands of one.

256. Without entering into that argument, will you please read the Section 18, page 53, of the agreement?—Section 18; shall I read the whole?

257. I will tell you when to stop, when you have read enough for my purpose?—Very well; "Nothing in these presents contained shall prejudice or affect the right of the Postmaster General from time to time to establish, extend, maintain, and work any system or systems of telegraphic communication (whether of a like nature to the aforesaid business of the company or otherwise) in such manner as he shall in his discretion think fit; neither shall anything herein contained prejudice or affect the right of the Postmaster General from time to time to enter into

Sir *Charles Cameron*—continued.

into agreements for or to grant licenses relative to the working and user of telegraphs (whether of a like nature to those worked and used by the company or otherwise) or the transmission of telegrams in any part of the United Kingdom with or to any company person or persons whomsoever upon such terms and whether with or without authority to exercise the powers in Section 5 of the Telegraph Act 1892 referred to as he shall in his discretion think fit."

258. That is all I want; that is a very emphatic reservation of the powers of competition under this agreement, is it not?—That is so.

259. I do not know whether it is your opinion, but it seems to me explicitly to show that, while honourably fulfilling every jot and tittle the arrangement made under this agreement, the Post Office could, if it thought fit, grant competing licenses?—There is no doubt the Post Office could, without any breach of honour or contract, grant additional licenses.

260. Or faith?—Or faith; there is no doubt about that.

261. In fact, I do not want to trouble you to repeat it, but you are aware that it is a fact that the draft licence itself contains a paragraph identical with that which you have now read?—That is so.

262. And that the policy of the Post Office has from the first maintained this right of granting competing licenses where it thought proper?—In speaking of policy, may I say——

263. I am not speaking of policy, I am speaking as to retaining the right?—That is so.

264. Now we will come to the question of policy. In the very interesting and full account you gave of the policies of different Post Office administrations you struck me as rather passing by a notable period, that of Mr. Raikes, in a manner hardly commensurate with its telephonic importance. In that administration you tell us you had an amalgamation between the United Telephone Company, the National Telephone Company and another; and you tell us that that elicited a letter from Mr. Raikes: could you oblige us with a copy of that letter?—Yes.

265. Will you read that letter?—Yes. This was a letter written on the 4th June 1889, and signed by Sir Arthur Blackwood, who was then Secretary: "The General Post Office, 4th June 1889. Sir,—The Postmaster General has had his attention called to the notice issued by the United Telephone Company to its shareholders on the 24th ultimo, and to the course which the telephone companies propose to pursue with a view to an amalgamation. Whether such course can be legally adopted under the terms of the licenses granted by the Post Office is a question on which the Postmaster General does not at present offer an opinion."

266. Yes, and does not admit the legality?—No: "but he desires me to acquaint you, for the information of the directors and shareholders of the United Telephone Company, that the amalgamation of the companies was not contemplated when the licenses were issued, and that any assurances outside the licenses which the companies may conceive themselves to have received from the then Postmaster General cannot be regarded as applicable to the state of things likely to result from the proposed amalgamation. I am, &c. (signed) *S. A. Blackwood.*"

Sir *Charles Cameron*—continued.

267. That is not the utterance I referred to: what I refer to is something much more strong and minatory?—There was a reply to that, and perhaps it is the rejoinder that the honourable Member refers to. As far as I know these are the only two letters that could answer the description.

268. Well, if you can let us have any passages from the rejoinder let us have them. What Mr. Raikes in effect said, was, that he would exercise his ministerial powers to do away with what he considered the injurious policy of amalgamation; that is, injurious to the country, of course?—If the honourable Member wishes it, I can read the further letter.

269. I do not wish to waste time; but you have in the records of the Post Office cuttings of Mr. Raikes' speeches upon postal affairs?—Yes; perhaps something may have been said in a speech in the House of Commons.

270. I do not think it was in the House of Commons; I cannot recollect when it was; but if you could get it and fill it in to your proof I should like to get it on the record?—If the Chairman approves, I can search for such a thing.

*Chairman.*

271. Certainly, I think that will be the best way, and I will communicate with Sir Charles Cameron upon it?—

Sir *Charles Cameron.*

272. We have got Mr. Raikes' policy sufficiently expressed in that letter, and it will be further developed in the "cutting." Mr. Raikes was against amalgamation. Mr. Fawcett also, you told us, was in favour of free trade in telephones?—Yes.

273. You described it in answer to Mr. Benn as free trade in telephones?—Yes, I think that was a correct description.

274. And you have read passages from the agreement entered into by the late Postmaster General, showing that the rights of the Post Office to grant competitive licenses under him also were strictly guarded?—That is so.

275 You have given us your own opinion, and did you tell us that both reason and experience point to the excellence of monopoly and to the disadvantages of competition in telephony?—If the honourable Member will allow me to say so, I do not think I have said anything on the "excellence" of a monopoly in the hands of a private company; what I said was, the inconvenience of competition. While Mr. Fawcett's policy was, I have no doubt, one of free trade, may I say that, as a matter of fact, the companies amongst themselves secured that it should not be one of free trade, because the United Telephone Company arranged that each of its subsidiary companies was to work only within a given province, so to speak, or section of the country.

276. And under the agreement the late Postmaster General provided, and I think very wisely, that licenses should not be given to persons likely to use them for the purpose of sale, did he not?—Yes.

Sir *Charles Cameron*—continued.

277. That is now guarded against?—Yes.

278. And if a new licence were granted that miscarriage would be prevented?—Yes.

279. You mentioned Dundee, for instance, as a place, the experience of which showed that if a cheap telephone company were started it was likely to be bought up by a dearer one, and the latter condition of that town would be worse than the first?—Well, I mentioned the fact of such a case having happened at Dundee.

280. Do you think the fact of there having been competitive companies in Dundee has been any disadvantage to Dundee, even allowing that they have been bought up?—I do not know that I could give an opinion about that. I think the general tendency must be towards an increase of expense, because if one company buys another up I think there must be a certain waste of expenditure in the transaction.

281. Yes, but if the National Telephone Company in Dundee or in Manchester buys up another small competing company in Dundee or in Manchester it can spread its cost over a large district, can it not?—No doubt that is so, but still the expense of that amalgamation must in some way fall on the consumers.

282. Of course, it would be very unfair, if you do not know the facts of the case, to examine you as to the actual results in Dundee or in Manchester; but, assuming that it was proved to you that in consequence of the introduction of competition into Manchester a twin wire system was introduced into Manchester, and cheaper rates than existed before the competition, and that even after the new competitor had been bought up a good deal of the impress of its good work remained, would not you admit that that proved that competition, even as it had hitherto existed, was beneficial?—Well, I should like to safeguard myself again against being the advocate of any company; but really, if the honourable Member will allow me, I must adhere to the opinion that even there (even in Manchester) that must have tended in the long run to an increase of expense to the subscribers.

283. Would you meet me so far as to admit that, if I prove the contrary, that it has actually brought down prices and improved the service in Manchester, your opinion was ill-founded?—If the honourable Member stated that it had brought down prices, I should, of course, accept it without any proof; but I do not think that affects my evidence, which is, that the tendency must be eventually to increase expense.

*Chairman.*

284. May I just put this question, if Sir Charles Cameron will allow me to interpose: if it has that effect in Manchester, would it not have a detrimental effect upon the telephone subscribers in other places?—Exactly; somebody must pay the cost.

285. Somebody outside must pay for the advantages that Manchester has got in that way?—Under the state of affairs suggested by Sir Charles Cameron, certainly. I think I might also say that while persons who entered into agreements at those lower rates are safeguarded during the terms of their agreements, I do not

*Chairman*—continued.

think you will find that the charges in Manchester generally have been reduced.

Sir *Charles Cameron.*

286. That I have no doubt is perfectly true; but the people who started the thing, and who went on the new company, have got a benefit?—Certainly.

287. Now, I will take exactly the same case of the Telephone Users Defence Association, with regard to whom I interpolated a question in the course of Mr. Benn's examination: do you happen to know anything about that Telephone Users Defence Association?—I have a general knowledge of it.

288. It was registered as a limited company, was it not; and the agreement with the new telephone company was, I think, that they should supply telephonic communication to any of its subscribers at a reduced rate?—I think that was so, speaking from memory.

289. Therefore, the number of people to whom the company were bound to supply that telephonic communication was not limited to any extent as regards the numbers of subscribers to the Telephone Users Defence Association?—That was so. Of course, I must again point out that this never came into operation, and we never saw the financial results of it.

290. That is quite true; but if you had prevented the amalgamation of the new company and the National Company, the subscribers to the Defence Association would have been able to compel the New Telephone Company either to implement its bargain or to go into liquidation, would they not?—No doubt.

291. You mentioned that at one time, when Mr. Fawcett introduced his new policy, there was considerable dissatisfaction expressed by questions in the House, and especially by Mr. Dwyer Gray?—Yes.

292. You are aware that that was dissatisfaction expressed on behalf of the telephone companies by Mr. Dwyer Gray as chairman of a telephone company?—Yes, I am fully aware of that.

293. You are aware that it was that?—Yes.

294. There is one point I should like to be perfectly clear on, and that is this: you mentioned to us that as an effect of the agreement the Postmaster General undertakes to confer upon the companies the powers conferred on him by Act of Parliament, and to provide underground wires between exchanges in one and the same area?—Yes.

295. But that, of course, is subject always to the control of the local authority, is it not?—Such wires would not be subject to their veto.

296. That is exactly what I want to make absolutely clear. I understood (and I understood it had been admitted by the Post Office) that no licensee of the Post Office could exercise the absolute powers which the Postmaster General could with regard to underground wires?—That is quite so; it is subject to veto, absolutely.

297. So that no licensee of the Post Office could be provided with underground wires between exchanges in one and the same area?—No; pardon me, that is a different thing.

298. Will you please tell us what the difference is;

Sir *Charles Cameron*—continued.

is; I want to know exactly how it stands, because some of the municipalities consider that it is very important?—The powers which the companies cannot exercise, except subject to veto, are the powers conferred by the Act of 1892; and they can only exercise those powers if they are conferred on them by the Postmaster General; but the provision of connecting wires underground between the exchanges of the company within the same area by the Postmaster General himself, is not an Act carried out by the telephone company, but an act performed by the Postmaster General.

299. And, therefore, by this arrangement on the part of the Post Office, Sub-section (*b*) of Clause 5 of the Telegraph Act of 1892, so far as it provides for the protection of municipalities, is rendered absolutely nugatory?—I do not think the case can be presented in that way, because the provision of such wires by the Post Office was contemplated by the Treasury Minute, and was, therefore, before the Committee, and before the House, when it dealt with the Bill which became that Act.

300. At all events we will get this on the note; will you please read Sub-section (*b*) of Section 5 of the Telegraph Act of 1892?—"Notwithstanding anything in the Telegraph Act 1878, a licensee shall not exercise any powers under the said enactments without the consent in London of the County Council, and in any urban sanitary district outside London of the urban sanitary authority and elsewhere of the County Council, and shall be subject to any terms and conditions which the County Council or urban sanitary authority may attach to any such consent and shall comply with any regulations of such council or authority from time to time in force in relation to telegraphic lines."

301. As you have explained, the Postmaster-General on his own account is entitled to take wayleave, wherever he wants to; he has undertaken, as I understood your description of this, to provide, or to lease his wayleave, so to speak, to the company?—His power is not arbitrary, I may point out; while he is not subject to an absolute veto, he has to obtain the consent of the local authorities, which, however, may not be unreasonably withheld, because he has a power of appeal, and could carry them to appeal.

302. To whom?—To a county court judge in certain cases, and, under this Act, to some other tribunal.

Mr. *Solicitor General.*

303. With an appeal to the Railway Commissioners, is it not?—To the county court judge, or magistrates, as the case may be, with an appeal to the Railway Commissioners.

Sir *Charles Cameron.*

304. There is one point which does not strictly appertain to this inquiry, but it has been imported into it, with regard to sixpenny telegrams. I take rather an interest in sixpenny telegrams. I understood you to say that you had to admit that they were responsible for a considerable portion?—No, I did not say that.

305. I am glad, if I did not rightly understand you?—I was referring to the period just immediately subsequent to their introduction;



Sir *Charles Cameron*—continued.

and I said that at that time they caused a considerable diminution in net revenue.

306. Do you agree with this, that the introduction of sixpenny telegrams caused naturally, an immediate decrease in the revenue?—Yes.

307. But that the increase in the number of telegrams rose so rapidly, that if it had not been for the check received by telephonic communication, things would have been on a sound financial footing by this time?—And certain other unforeseen circumstances.

308. You are aware, that in the report of the Postal Committee of 1875 (I think the Committee that Sir Julian Goldsmid moved for), there was a paragraph stating that the principal objection was, that the cause of the diminution in the Postal Telegraph Revenue was the increased facilities and diminished charges?—There was no reference to telephones, because we knew nothing about them at that time.

309. You mentioned a provision as to wayleaves; you said, I think, that the company was under this agreement, to pay a nominal sum for wayleave, instead of the 20*s.* which they pay at the present time?—Yes.

310. These are not on trunk lines, of course, but on lines within exchange areas?—Yes; they will no longer require to pay outside areas, because we are to have the wires, except in cases where they carry a single wire out for an individual subscriber.

311. Take such a case as this: within the London area you pay a heavy wayleave to railways, do not you; you pay a pound a mile to railways, do not you?—As the honourable Member knows, in many cases we bought up the absolute and exclusive right to wayleaves at the time of the transfer of the Telegraphs to the State.

Sir *Julian Goldsmid.*

312. In most cases?—In most cases.

Sir *Charles Cameron.*

313. In cases where you pay the pound a mile for wayleave, would this agreement cover the arrangement that the telephone company should have it for a shilling a mile?—No; if the honourable Member will allow me to explain; while on the lines in question, the Postmaster General has the exclusive right of erecting his telegraphs, of course the railway is not his property, and therefore he cannot confer a right on anyone else; he only has the exclusive right to exercise it himself; but as he has the exclusive right, no one else can go there without his permission. He does not confer the right (the railway company confers the right), but he must give his permission; therefore, when the telephone company go to a railway company, they have to pay the railway company what the railway company choose to ask; and hitherto, they have not only paid the railway company, but they have paid the Post Office a pound a mile for permission to go to the railway company; now that permission is to be given at a shilling a mile instead of twenty shillings.

314. Do you consider that competing telephone exchanges have worked within single areas; that is so, as a matter of fact, is it not?—That is a fact.

Sir *Charles Cameron*—continued.

315. They were worked in Dundee, they were worked in Manchester, they were worked, I presume, in London, were they not?—I think not, practically.

316. They were intended to be worked?—Yes.

317. There were two or three companies started for that purpose, were there not?—Yes.

318. But they have been worked; and they have been worked, as you said, in Christiania?—Yes, that is so.

319. You mentioned that there would be the inconvenience of the subscribers having to be members of both exchanges; is there anything to prevent terminal charges such as exist, or are supposed to exist, in the case of exchanges separated by trunk lines?—We found by experience that two companies working together in the same area were bent on competition in the sense of each one endeavouring to exclude the other, and therefore they have never approached each other or been willing to work together.

320. Are there many people on the London Telephone Company who have a large number of independent telephones because of the difficulties they experience in getting through the exchanges; stockbrokers, for instance?—I am afraid I cannot give particulars.

321. Have you many postal subscribers, for instance, who are members?—We have a good many cases of people who have wires between their offices in the City and, say, their offices or their works on the banks of the river. That is an example.

322. Have you many private telephone wires in London?—Of that kind, yes; we have a fair number.

323. Could you give us any idea of the number?—I am sorry I cannot give you an idea.

324. Or the charges?—The charges are stated in the Post Office Guide. What we charge in London for double wires with telephones are these rates, 9*l.* a mile "over house" or "underground" for the wire, or 7*l.* a mile on roads; and then we charge in addition to that 2*l.* 10*s.* for each telephone.

325. You have no exchanges, of course?—In London, no.

326. I understood you to say that you have an exchange at Newcastle. You mentioned two or three towns?—I mentioned Cardiff, and Newport, and Newcastle.

327. Have you got these exchanges still?—Yes.

328. And you have the National Telephone Company there to?—That is so.

329. So that you have this system of competing exchanges there?—That is so.

330. Have you any means of interchange communication between them?—No.

331. There is no physical difficulty in interchange communication, is there?—None.

332. But the National Telephone Company surely could not have hoped to swallow up the Post Office?—I am afraid, if you take evidence from the National Telephone Company, they will be able to show you that they do in many cases practically kill our telephone business.

333. You had the start of them, had not you?—In certain cases.

Sir *Charles Cameron*—continued.

334. But the Post Office, as a matter of fact, has never been very keen about telephone exchanges?—Speaking for myself, I have been extremely keen.

335. Then how was it that, with a start, you practically admit that you have been beaten out of the field in those towns?—Well, I am afraid I must say that the Post Office was not allowed by its financial masters to pursue the same course as was pursued by the companies.

336. What are your charges; have you got your charges in Newcastle as compared with those of the company?—Our charges in Newcastle for the telephone exchanges are (this is for double wires) 8*l.* a-year, within a quarter of a mile of the exchange; 10*l.* within half-a-mile; 12*l.* within three-quarters of a mile, and 14*l.* within a mile.

337. And what are the company's charges?—Uniformly, within a mile, 10*l.*

338. If you had not those "financial masters" (I presume you refer to the Treasury, who are always the bugbear of every department), you would probably adopt at least, the same charge as the company?—Well, I am not quite sure, because in Newcastle there are, as you are aware, an immense number of business people within a quarter of a mile of the exchange; they are crowded together on the quay side; and under that scale of charges, providing for a difference between each quarter of a mile, we serve an immense number of people at a charge of 8*l.* a year, which is lower than the uniform charge of the company.

339. Then what you would probably do, I suppose, would be to keep on the 8*l.* minimum, and have the 10*l.* maximum?—I think, if the honourable Member will allow me, I could explain that there is some reason for it. I do not say that we might eventually adhere to this charge, but there is some reason for it.

340. Will you state what the reason is?—To take the case of Newcastle. You carry down main lines of communication from your central office into the heart of the business part of the city; it is a wholesale business; the wires are carried down there in pipes in large numbers, and these wires, to a large extent, if given up by one subscriber, are readily taken up by another. They go along the business quarter of the town; then they are carried by short spurs into the offices, and if one man gives up his wire, the probability is that that very same wire, minus the little connecting bit, is taken by another; therefore, taking into account the wholesale nature of the work, and also the fact that it is largely a permanent plant, you can afford to do these short distances for less than you can a long distance. Now when you get out to the outskirts of the town, you have sometimes to carry a wire independently, not along with others; and therefore, if you adopt the plan of the differential rate, you justify to yourselves, on financial grounds, the higher charge for these outlying wires.

341. I presume your opinion is that if you had been allowed a free hand with the telephone business in towns when you started your exchange, you would have held your own against all comers?—I should certainly have tried my level best to do it.

342. I suppose

Sir *Charles Cameron*—continued.

342. I suppose you do not admit that you would have been beaten?—No, I do not admit it.

343. At all events, we have got over one point, that is, that there is no physical difficulty as to the working of two exchanges in the one area?—No, there is no physical difficulty in combining the two.

344. You work in Newcastle and you have a company working alongside of you, and you do not combine owing to some "cussedness," I suppose, on the part of the one party or the other (but you could combine), and you do work there?—We do work there side by side.

Sir *James Fergusson.*

345. I will ask you one or two questions upon this, as some questions have been put a little beyond the Order of Reference. I would like to ask you, first, whether the facilities the Post Office conferred free of charge were intended to act as feeders to postal and telegraphic business, as set forth in paragraph 7 of the Treasury Minute?—Certainly.

346. That was the consideration for which the free entry was given, was it not?—On the one hand it was held that if the company's subscribers could communicate with the Post Office there would be an access of Post Office business; on the other hand it was held that the facility did improve the position of the company in enabling them to serve their subscribers better.

347. And you anticipate that this and other facilities given under the agreement will improve the telephone service in local areas?—Quite so.

348. But until the agreement comes into force there can be no great improvement?—That is so.

349. Then I would like to ask you this: was not the attitude of the Post Office in framing the scheme on which the agreement was founded this: that competition within the same area was *primâ facie* undesirable, but that the fullest power must be retained to grant new licenses or to open Post Office exchanges?—That is so.

350. Then I will ask you this: was the provision in Clause 8, Sub-section 2, of the agreement, that is to say, regarding the exchange of messages from one company to another, introduced to meet the objection of the companies that a license to a new or local licensee would enable an exchange with a small capital to benefit by the great expenditure of a larger company?—That is so.

351. And we met that, did not we, by saying, "But you shall have consideration for it"?—That is so.

Mr. *Solicitor General.*

352. You were asked by Mr. Benn some questions with regard to the relative rates at Stockholm and London?—Yes.

353. Now, from your experience, can any useful comparison be made between those two areas?—My personal opinion is, that a useful comparison cannot be made.

354. What are the elements that differ in either case, which lead you to give that answer?—Well, some of them, I think, are these: in Stockholm there is much greater facility of wayleave, materials are cheaper, the services of the operators are cheaper, and, generally, the operations of the companies are facilitated in every way; whereas in London the difficulties of construction are very great over houses, and the difficulties with regard to obtaining wayleave are very great, involving the company in expense, both the material and labour are more expensive, and the area covered is immensely greater, and the service rendered, therefore, is also greater.

Mr. *Solicitor General*—continued.

355. I see in a document that has been put before us it is stated that the area in London is 630 square miles; that is the metropolitan area?—Yes.

356. I do not know whether you know what the Stockholm area is; do you know that?—I am told that it is the municipal borough of Stockholm, whereas the London area includes a very much larger area.

Sir *Julian Goldsmid.*

357. It is 10 square miles, is it not, as against the 630?—I gave a radius of a mile.

Mr. *Solicitor General.*

358. You did not give us, I think, any figures indicating the extent of this municipal Stockholm area?—Except that I understood that it was within an area of a mile; but, perhaps, I ought to get some further information upon that.

359. You have been asked by Sir Charles Cameron some questions as to your experence of competing exchanges; he gave you as example of competing exchanges Dundee and Manchester; do you know what the result of competition in those cases was?—I know that in both cases there has been absorption, and an end of competition.

Mr. *Snape.*

360. In both cases the cheaper company was absorbed by the telephone company?—That is so.

*Chairman.*

361. One or two questions I want to ask about the effect of the telephone service upon the telegraph revenue; is it, in your opinion, due to the fact that the telephone service takes away the most remunerative part, or affects mostly the most remunerative part, of the telegraph revenue?—That is so.

362. Then you were asked about telegraph extensions being charged to revenue, and not to capital; that was the case at both the periods that you took for comparison, was it not?—That was so.

363. And therefore did not affect the value of the comparison, as indicating a serious falling off in the telegraph revenue?—I think not.

364. You were asked (I think by Mr. Benn) whether Parliamentary sanction had ever been given to a change in the policy of the Department, the policy having been favourable, rather than otherwise, to competition; Parliamentary sanction had never been given, had it, in any form, so far as you are aware, to the policy of competition?—No. Of course, I suppose it might be argued that Parliament acquiesced in

*Chairman*—continued.

the policy that was announced in Mr. Fawcett's speech, but there was no direct Parliamentary sanction.

365. No direct Parliamentary sanction?—None.

366. And the change which has taken place in the policy of the department has been the result of increased experience gained, not only in the working of the system in this country, but also of experiences gained from the telephone systems in foreign countries?—That is so.

Mr. *Tully.*

367. With regard to the difference in the price between London and Stockholm, has not the National Company had to increase their capital (to water their capital), to bring about all those absorptions of the other companies; and to pay a dividend on that large capital, have not they had to increase their price in London?—No doubt, the capital of the National Telephone Company is very large.

368. Have not they had to increase their capital in order to absorb the smaller companies?—Their capital was increased at several of those amalgamations; that is so.

*Chairman.*

369. With reference to that last question, is not the reasonableness of the charge rather dependent upon the service which is given?—Yes.

370. And is it not the case, therefore, that in a large area a large number of subscribers to a telephonic exchange with a large number of people, not only causes greater expense, but justifies an increased charge?—Yes, I think it does it, in two ways; the larger area not only requires a greater expenditure on plant, because the plant extends more widely, but it also brings into communication with each other a very much larger number of people, and the increase of cost in putting a large number of people in communication is not proportionate at all; that is to say, if you had a thousand subscribers who required to be put through to each other, each of these thousand persons could only possibly communicate with 999, whereas, if you put into communication on an exchange system 10,000 people, each of those subscribers could possibly speak to 9,999; and therefore, the more you increase your exchange the more you increase (and immensely so) the number of communications that each subscriber can make, or wishes to make, and so you increase enormously your cost at your central office (or your central offices if you have more than one), of putting these people into communication with each other.

Mr. *Snape.*

371. But taking that illustration, in the first case you only have a thousand persons contributing to the revenue of the Telephone Company; in

Mr. *Snape*—continued.

the second case you have 10,000 persons; so that, if there is increased expense, you have another 9,000 subscriptions towards it?—That is so. And of course the increase with regard to maintenance of wires and apparatus may be proportionate; but what I was speaking of was the cost of working the exchange in putting the subscribers into communication with each other. Now the increase there is much more than proportionate to the increase in the number of subscribers. If you have a thousand people on these wires, of course you have the expense of a thousand wires; and if you have ten thousand it may increase the expense of the wires only ten times. No doubt, it is proportionate there largely, but when you are dealing with the work that is done on the system, you are dealing with the possibility of putting each one of those persons, in turn, into communication with 9,999 people, that is to say, in a given day one of these subscribers on the larger system could ask the company to put him into communication in succession with 9,999 people, whereas on the smaller system he could only possibly ask them to put him into communication with 999.

372. That is so; but the possibility of his doing it is not probable, and I presume the provision of working arrangements would be according to the law of averages and not according to possibilities?—I have put it in the extreme case, because the extreme is the only figure known to me; but the average follows exactly the same law.

Sir *James Fergusson.*

373. You can give a case, cannot you; do you know what the rate of subscription is at Chicago in the case of a switch board with 10,000 subscribers?—In Chicago the charge is 36*l.* a-year, and in New York it is 50*l.*

Mr. *Tully.*

374. Are not materials much dearer in America than in this country?—I am not aware that they are; I should say that probably the services of operators were more expensive. With regard to materials, we have had the offer of some materials here on rather favourable terms from America.

Sir *Charles Cameron.*

375. I want to ask whether you can give us the number of subscribers to Post Office exchanges in Newcastle and other large towns where the Post Office has exchanges; you need not do that now, but you can do it?—I can give it to you at once.

*Chairman.*

376. Put it in the evidence when you get your proof; and perhaps you will also fill in with the number of Post Office subscribers the number of the National Telephone subscribers?—Alongside; yes.

Sir ROBERT HUNTER, called in; and Examined.

*Chairman.*

377. You are the solicitor to the Post Office are you not?—I am.

378. I do not propose to ask you any questions, but there may be points arising as to the agreement which Members of the Committee may wish to put to you?—Certainly.

Sir *Julian Goldsmid.*

379. I understand you have gone into all the legal aspects of these different clauses?—Yes, I have.

380. Clause 12 provides: that "the Postmaster General will, in any case, so far as it is practicable so to do (but not otherwise), at the request of the company, and upon such terms as may from time to time be agreed upon between the Postmaster General and the company, connect by means of underground wires any two or more exchanges." Can you tell me whether the intention of that clause was to provide for cases such as Glasgow, which requires, I understand, to have underground communication between the local exchanges?—I do not know that Glasgow was specially in contemplation, but it was contemplated all through the arrangements in 1892, that the Postmaster General should assist the companies in connecting exchanges, as distinguished from giving them powers themselves to lay down or erect wires. You will find a paragraph about it in the Treasury Minute.

381. The reason for that would be obvious, would it not; that they might not interfere with the local authority in any way?—Quite so; we might have pipes there already, and we might put their wires in our pipes.

382. The Postmaster General would also be able to make arrrangements with the local authority, and might simply instruct either the municipality or the company (as was agreed), to carry out the work?—We should carry out the work under our way-leave powers.

383. Then if Glasgow, for instance, desired to have improved underground communication, it would be the Post Office that would have to carry it into effect?—It could be done in either one of two ways; either the company could exercise their powers with the consent of the Corporation, or, in the case of connecting two exchanges (the clause does not go beyond that), we could, where we found it practicable, exercise our powers.

384. That applies to the exchanges?—Yes.

385. If it were desired by the Corporation of Glasgow that they should have improved communication, otherwise than between two exchanges, they would have to arrange it with the telephone company?—Yes.

386. One of their conditions might be, for instance, that they should do the work?—There is a technical difficulty about that. I do not know that a corporation has, strictly, any right to take up its own streets except under statutory powers.

387. Is there that difficulty?—Technically, I take it, any interference with a street is an indictable obstruction of the highway, unless they have statutory powers.

Sir *Julian Goldsmid*—continued.

388. To take up their own streets?—Yes.

389. But so far as it goes, you intended this clause to cover the more important of the two matters, namely, connection with exchange?—Yes.

*Chairman.*

390. It is confined entirely to connection with exchanges?—Yes, it is.

391. In the case of Manchester, I think the Corporation of Manchester have come to terms with the National Telephone Company, by which the Corporation do the work and the National Company pay them?—I have seen an agreement of that kind.

Sir *Charles Cameron.*

392. Have they any statutory powers?—I do not think they have any statutory powers to put down wires for telegraphic purposes.

Sir *Julian Goldsmid.*

393. Then the wire would be put down probably by the National Company during the time the Corporation was doing local works?—At the time that agreement was made the National Company had not any powers of way-leave. After the agreement with the Post Office is made no doubt the matter would be arranged in that way; the National Company would exercise their powers with the consent of the Corporation.

Sir *Charles Cameron.*

394. Then, about the validity of this Sub-section (b), of Section 5 of the Telegraph Act: the corporation by this method (by the Postmaster General conferring his powers upon the telephone company), would lose its rights of control altogether?—So far as the connection of exchanges goes; but that would not enable the telephone companies to connect their exchanges with subscribers.

395. Then what would be the effect, so far as overhead way-leaves are concerned, crossing streets, and so on?—There they depend on their own powers.

396. And the Postmaster General cannot give them powers?—Yes, he can; we give them the same powers that we have ourselves.

397. You have powers, have you?—The power consists (speaking shortly) in a right of crossing the street, with the consent of the road authority; or, if they withhold their consent, then we have an appeal to a stipendiary magistrate or a county court judge, with further appeal to the Railway Commission.

398. I see you have in your definition clause, a definition showing the application of the Act to Scotland, but you do not give any equivalent for the county court judge?—I think there is an equivalent in the Act of 1878.

399. Is the Act of 1878 read with this Act?—Yes it is; I think it is the sheriff in Scotland. It is in Section 4 of the Telegraph Act, 1878. In Scotland it is an appeal to the sheriff, with further appeal to the Railway Commission.

Sir *Charles Cameron*—continued.

400. On points of law I suppose, there is absolutely nothing in this agreement which can be held to restrict or limit in any way the power of the Postmaster General to grant competing licenses as he may think proper?—Certainly not.

401. Except that he undertakes not to grant them to private individuals without the consent of the municipality?—He does not even undertake that in the Agreement. That is merely a statement in the Treasury Minute of the view that commended itself to the Government of that day; but it is expressly guarded in the succeeding paragraph of the Treasury Minute.

402. So that in the case of the agreement even that restriction is not laid down?—Certainly not.

403. But that is a restriction, I suppose, which would commend itself to anyone, and one that the Post Office would be likely to act upon?—That was the view at the time the Treasury Minute was drawn up.

404. Was it the view of the Treasury, or the view of the Post Office?—I do not know that I am competent to speak upon that; you will find it in the Treasury Minute, as laid on the Table of the House.

Mr. *Snape.*

405. As the Agreement gives full and free power to issue licenses to companies and municipalities; does it also reserve power to the Department to establish in localities a telegraphic exchange?—Yes, absolutely.

406. The Post Office itself could enter into

Mr. *Snape*—continued.

competition with any existing or proposed company?—Oh, yes, certainly; Article 18 is the article that shows that.

Mr. *Tully.*

407. I do not know whether I should be in order in asking this question or not, but I should like to know this for my own information; at the time this draft agreement was drawn up there were these two companies in existence; does that affect the binding nature of the agreement at present?—As a matter of law, there is an agreement with each of the companies. As a matter of fact and of law, if I may say so, there was laid on the Table of the House an agreement with each of these two companies, and we are going to enter into an agreement with each of these two companies, the "National" and the "New."

408. Have they been amalgamated?—They are not technically amalgamated; technically they are still two companies, and we are going to enter into agreement with the two companies.

409. The agreement contemplates the old time, when they were dealing with a state of competition, and not a state of monopoly?—That does not affect the legal position.

Mr. *Snape.*

410. In answer to my question just now you referred me to Section 18 of the Agreement; but looking at that section I find that it exclusively applies to "telegraph," and makes no reference to "telephone"?—"Telephone" is included in "telegraph"; it is only one kind of "telegraph."

*Friday, 29th March* 1895.

MEMBERS PRESENT:

Captain Bagot.
Mr. Baird.
Mr. Benn.
Sir Charles Cameron.
Mr. John Ellis.
Sir James Fergusson.
Sir Julian Goldsmid.
Mr. Arnold Morley.
Mr. Moulton.
Mr. Snape.
Mr. Tully.

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

BAILIE SAMUEL CHISHOLM, called in; and Examined.

Sir *Charles Cameron.*

411. YOU have been in business in Glasgow for many years, have you not?—I have.

412. And you are at present, and have been for the last seven years, a member of the Glasgow Town Council?—That is so.

413. You are also a magistrate of the City, and a Justice of the Peace of the County of the City?—I am.

414. The Town Council of Glasgow, I understand, on the 6th April 1893, appointed a special committee to consider and report on a motion that had been brought forward by a member of the Council?—That is so.

415. Will you please read the motion; give us the terms of the motion?—The motion was: "That in terms of Treasury Minute of 23rd May 1892, the Corporation, as a local authority, resolved to apply to the Postmaster General for a licence to supply the community with an efficient telephone service."

416. And you were appointed a member of that committee?—I was appointed a member of that committee.

417. And since then you have taken an active part in the discussions?—Yes; I have taken a considerable interest in the matter.

418. Will you tell us what was the result of the deliberations of this committee?—The committee resolved to recommend the Council to apply to the Postmaster General in terms of the Treasury Minute, for a licence to supply the community with telephone service.

419. And was the licence applied for?—The licence was applied for.

420. On what date?—On the 12th August 1893.

421. What was the wording of the application for the licence; will you please just give us the wording of the application?—"To empower the Lord Provost, Magistrates, and Council, to establish a telephone exchange service within the City and Royal Burgh of Glasgow."

422. You have not received any definite reply to the application since, have you?—We have not received an affirmative reply since.

423. And you have from time to time made further representations to the Post Office, I think, on the subject?—Yes; we have applied in writing and by interviews, to the Postmaster General.

Sir *Charles Cameron*—continued.

424. Now will you please explain to the Committee the considerations which influenced the Corporation of Glasgow, in taking the step which they have done in applying for the licence?—The primary reason was the very unsatisfactory nature of the service which the National Telephone Company gave to the citizens.

425. Before we go on from that point you are prepared to state that the service in Glasgow is very unsatisfactory, are you not?—Yes, I am prepared to state that.

426. Can you give any examples of the extent to which dissatisfaction has been expressed?—Well, in conference with subscribers one hears continually complaints about the difficulty of getting connection.

Sir *Julian Goldsmid.*

427. Is it not a Scotchman's privilege (like an Englishman's) to complain?—We are pretty like one another; there is a good deal of human nature in Scotsmen.

Sir *Charles Cameron.*

428. In one of your interviews with the Postmaster General you referred to a case where some subscriber had been so dissatisfied with the service that he had taken violent measures, I think, to remove it?—Yes. There was a friend of my own, a member of the Corporation of Glasgow, who was so dissatisfied with the continual impossibility of getting connection, or with the interruptions he found when he had got the connection, that after putting up with it for a long time he became so provoked that he just smashed the whole thing down and threw it out. I mentioned that, I may say, to the Postmaster General, and when I got home from London I found a letter from another friend who fancied I had been referring to him (it was not him to whom I had been referring), and he said I had not quite accurately described the method in which

Sir *Charles Cameron*—continued.

which he had got rid of it; but he had done something of the same kind; he had taken it down and allowed it to lie, and had written to the Company to come and take it away.

429. That incident, which occurred with you personally, in the shape of this letter, I suppose, impresses you with the idea that such instances as you quoted to the Postmaster General were not solitary?—They are not solitary by any means.

430. What are the chief complaints that the Glasgow citizens or telephone users make about the telephone service?—I have already referred to the difficulty they have frequently in getting into communication with the parties with whom they wish to correspond. Then frequent interruptions take place while they are in the midst of a conversation. Sometimes they discover (I have discovered myself, and I have heard of many others who have discovered) that while they are speaking with, it may be a client, they are being overheard by a third party; it may be a party in the same line of business as one or other of us, an interested party therefore in the subject of our conversation; and these and such like things are the sources of that dissatisfaction and irritation which prevail to a large extent in Glasgow.

431. You attribute the delay you experience to defective exchange arrangements?—Yes.

432. And the interrupted conversations, or rather the mixed conversations, and the noises to the single wire system being used instead of the double?—We believe that to be the occasion of it.

433. And you believe there is only one way of getting rid of the latter drawback to telephonic communication; that is by the twin wire system?—We understand so.

434. Do you think there is any chance, or any great chance, of the National Telephone Company introducing a twin wire system into Glasgow?—We really scarcely expect that they will introduce it.

435. What are the grounds for your belief?—Well, they could not introduce the twin wire system without requiring, practically, to obtain something like the control of our public streets. That is one important reason. It is impossible that this system can be carried out without their having a right of access whenever it suits them, or whenever they desire it, to our streets; and that is a thing in regard to which the Corporation of Glasgow feels very strongly.

436. And which the Corporation would resist to the uttermost?—I am satisfied that they would.

437. The Corporation have, at great expense, acquired the control of the streets, have they not?—The Corporation have done a very great deal to show how determined they are that no private company shall have a right to control or to access to their streets. They have bought over, at a large expense, the water undertakings of the companies which existed prior to the municipality taking them over, and the gas companies. They have taken the electric lighting into their own hands, although the use of it is confined to a comparatively small number, and latterly they have taken over the tramway system

Sir *Charles Cameron*—continued.

of the City; and in all those cases they were very largely influenced by the consideration to which I have referred.

438. In connection with the tramway system, it has been under consideration to use electric traction, has it not?—That has been under consideration.

439. I shall not examine you minutely on the point, but it has been found that the telephone companies objected to electric traction being used, on the ground that it would interfere with the underground wires, and so on?—That is so; they object to that.

440. You believe that serious difficulties would result were underground way-leaves granted to a private company like the National Telephone Company?—Great complications would necessarily arise.

441. In fact, you find complications arising, do not you, between the different departments of the City. Will you please explain to what extent you find that to be the case?—Well, the operations of the gas and the water, and the tramway, and the electric lighting, are under the charge of separate committees, and they require to consult and confer with one another in order to prevent each of them running at separate times, and keeping the streets in a continual turmoil.

442. And without that conference and co-operation, and identity of interest, that would be impossible?—That would be impossible.

443. Do you think that in a large community like Glasgow, where so many things involving the control of the streets, namely, sewers, tramways, water pipes, electrical culverts, and gas, are all in the hands of the Corporation, any other thing requiring control of the streets should be in the same?—Yes, we are satisfied on that point.

444. And you believe that the twin wire system cannot be introduced without that right which you have acquired, and paid so much money to acquire, being encroached upon?—We are led to understand that.

445. But independently of that you think there is a difficulty, so far as the capital of a private company is concerned?—Yes, we see difficulty in that direction also in regard to the possibility of having the twin wire system introduced.

446. The National Telephone Company is very heavily capitalised, and that has prevented it from lowering its charges, has it not?—Yes, that is our belief.

447. You, on the other hand, could raise money very cheaply?—Very cheaply, and we require to pay no dividend, no profit.

448. And you could afford to work the telephones, practically, at cost price?—Yes, we could.

449. Would you please tell us what the subscription for the telephone in Glasgow at present is?—At present the subscription is 10*l*.

450. You consider that that is a much larger charge than is conducive to the full use of the telephone, do you not?—Oh, yes; we feel satisfied that if it were reduced to a more moderate amount the telephone would be brought within the reach of the ordinary citizen, the shopkeeper, who

Sir *Charles Cameron*—continued.

who feels the present amount practically prohibitory.

451. The charge has not always been 10*l.*; it was formerly considerably dearer, was it not?—It was formerly 20*l.*

452. About 10 years ago it was 20*l.*?—Yes, 10 years ago it was 20*l.*

453. Can you give the Committee what would at that time be the number of subscribers in Glasgow?—A little over a thousand.

454. I believe the reduction was in consequence of competition?—Threatened competition.

455. And since the reduction, within the 10 years, the number of telephone subscribers has largely increased?—Largely increased.

456. It now amounts to 3,000, does it not?—Three thousand.

457. That is to say, it has increased about threefold since the charge was reduced?—About threefold.

458. The rental has increased as a matter of arithmetical calculation simply?—Yes.

459. And, consequently, the amount of percentage which is paid to the Post Office has increased also?—It must, necessarily, have been so.

460. Now the Telephone Company, as you say, has to keep up rates which will enable it to pay dividend and interest on its money?—Precisely.

461. And you say that a large amount of that capital represents really intangible goodwills of bought-up licensees?—To a very large extent.

462. Your committee has taken evidence as to Continental experience, has it not?—It has.

463. I shall not ask you, particularly, as to that; but you have found, generally speaking, that in a number of Continental countries, and notably in Norway, Sweden, and Switzerland, very much smaller charges prevail?—Yes. In a report presented to the Council by the committee it is noted that Stockholm, with its population of 228,000, has upwards of 8,000 users, while Glasgow, with a population of 815,000 (that includes the suburbs), has not more than 3,500. The 3,000 I referred to was within the city; the 500 includes the suburbs, there being one subscriber to every 27 inhabitants of Stockholm, where there is only one to every 230 in Glasgow.

464. Your committee went into the matter so far that they got some estimates upon the subject?—Yes. This report which the committee presented also states that "reliable estimates in detail have been prepared showing that for a capital of about 15*l.* per user, the latest and best system can be laid down in Glasgow within the municipal radius. On this basis a thoroughly efficient service could be given at an annual charge of about 5*l.* per user, or possibly less."

465. You are aware of the agreement which has been entered into between the Post Office and the Telephone Companies?—Yes.

466. You are aware that it is admitted that that agreement does not prejudice the case for granting licences to Municipalities?—Oh, no; the rights of the Postmaster General are expressly reserved.

467. And you have no objection to the agree-

Sir *Charles Cameron*—continued.

ment, and do not come here to say a word against it?—I am giving no evidence about the agreement whatever.

468. But what you want is to make a protest in favour of your rights; that is to say, of the rights reserved under that agreement?—Yes.

469. Pending the negotiations that have taken place since your application, you have had no definite refusal of a licence, have you?—Well, I am afraid we regarded Mr. Morley's last answer as very nearly a refusal.

470. What date was that, and what was the effect of it?—The date was 11th February 1895, and at the close of that interview I am reported to have said to Mr. Morley: "I understand you have not said 'no;'" to which Mr. Morley replied, "I have said I cannot grant it just now; I have indicated my own opinion with as much courtesy as I can."

471. Surely a Glasgow Scot would not take that for a definite refusal?—No.

472. But what I meant was this: You have had in the course of these negotiations, from the date of your application, no official communication to the Corporation from the Post Office, stating that the application could not be entertained?—No, we have not.

473. In fact, you have not had the smallest evidence that there was officially any change in the previous policy of the Post Office?—We have not.

474. You mention on your notes certain statements of my right honourable friend, Sir James Fergusson (ex-Postmaster General), who spoke words which led the Municipality to believe that there was no intention of refusing them the licence?—Yes; both Sir James Fergusson and (notably) Mr. Goschen spoke words which led us to believe that.

475. You have got on your notes here certain quotations from speeches by Sir James Fergusson and Mr. Goschen which, in your opinion, and the opinion of the Telephone Committee, were calculated to encourage them in the belief that the Post Office was not about to adopt a policy hostile to competition, and granting licences to Municipalities?—Yes; statements made in the House of Commons led us to believe that.

476. Just read them?—Sir James Fergusson said in the House of Commons on the 22nd March 1892 (it is 1893, I see, in the manuscript, but it should be 1892): "When the local authorities are certain that a Telephone Exchange is desirable in their area, and the Government is satisfied that the licensees are in a position to carry out the undertaking, that it is in the public interest that they should have a licence, then it will be granted," and Mr. Goschen said on the 29th of the same month, "My right honourable friend" (referring to Sir James Fergusson) "has explained how the trunk lines will be taken in hand by the Government, leaving to the localities the working of the local exchanges. If this is done I believe the public will be better served than if the Government take over the whole business, because there would be competition in the localities to serve the public as well as it can be served." Then he says, "It has been suggested during the course of this discussion that the local authorities might be willing

Sir *Charles Cameron*—continued.

to undertake the telephone business themselves. I see nothing" (says Mr. Goschen) "contrary to the Government policy in such a proposal."

477. The local authorities in Glasgow are, in Sir James Fergusson's words, "certain that a Telephone Exchange is desirable in their area"?—Yes.

478. And there can be no reasonable doubt that they are in a position to carry out the undertaking if granted to them?—I think we can satisfy the House of Commons upon that point.

479. The Corporation of Glasgow are great telephone users, are they not?—We are.

480. Will you please state to the Committee the amount of rental you pay for telephones used by the Corporation?—Over 1,600*l.* per annum the Corporation pays as an individual subscriber to the Telephone Exchange.

481. The Corporation is therefore a very large telephone subscriber, and its members are in a position thoroughly to understand the drawbacks and defects of the system?—Yes, they are. I have a map with me of the lines which the city use as a Corporation; if it is at all desirable I can hand it in.

482. Let Mr. Beveridge hand it to us. (*The map was handed in.*) The Corporation of Glasgow, I believe, are inclined to be perfectly reasonable in their demands if the licence were granted them?—Yes, we are disposed to meet the Government in every way we can.

483. The Corporation, I believe, are in favour of the Post Office taking over the whole thing as "a pious opinion"?—I have no doubt they would be if that were to be done just now.

484. But you are prepared to say that the Telephone Committee of Glasgow are quite ready to recommend the acceptance of a licence terminating at the same date as the licence of the Telephone Company?—We are; and terminating at an earlier date if, prior to this, the Government resolve to take the exchanges into their own hands.

485. But you would be prepared to get up a first-class service in Glasgow and would enter into an agreement with the Post Office to hand it over, if required, on the most reasonable terms and without any object of more than covering your outlay in it?—Precisely.

486. Do the company pay any wayleaves to the Corporation?—Oh, no.

487. So that they get your 1,600*l.* subscription for telephones, and do not pay you anything for the rights that you allow them of crossing your streets, and so forth?—No.

488. And fixing their wires on your buildings?—No.

489. Mr. Morley wishes me to ask you how the 1,600*l.* is made up; whether it is for wires between your various offices, or for wires on to the exchange; just give us a statement of how it is made up if you have it?—They are largely exchange lines; some of them are private lines, but the most of them are exchange lines.

Mr. *Moulton.*

490. Have you had any detailed estimate of the cost of a municipal telephone service in Glasgow?—The committee in its memorandum, or report, submitted to the Council in 1893, had estimates before them.

Mr. *Moulton*—continued.

491. Were those estimates put before them in detail?—They were put before the committee in detail.

492. But the result was 15*l.* capital per user, and the possibility of working it at 5*l.* rental?—£.5 or less.

493. And would that have been a system with underground wires?—With underground wires.

494. I may take it, I presume, that underground wires are mainly used between the exchanges; the wires to exchanges will always be more or less overhead, will they not; it is not worth while putting a wire underground if it is only going to the nearest exchange?—No.

495. Have you given any attention to the Telegraphs Act, 1892?—I have not given it any special consideration, apart from any bearing it has upon this subject.

496. You know the provisions which require that a Telephone Company should get the consent of the local authority before it interferes with the streets?—I am aware of them.

497. May I ask you whether your Corporation attach importance to that?—Oh, a very great deal of importance.

498. It is in Section 5 of the Act; perhaps I may hand the Act to you (*handing same to the Witness*); you say you attach very great importance to that?—We do.

499. I may take it that you think that that is a provision in favour of local authorities that should not be tampered with or interfered with in any way?—We are very strongly of that opinion, or of that belief.

500. Have you examined the agreement that has been made with the National Telephone Company and the New Telephone Company?—Yes, I have had it under my consideration.

501. Have you got it before you?—I have not.

502. Perhaps I may pass you a copy (*handing same to the Witness*)?—Thank you.

503. Will you look at Section 12 of that agreement?—Yes.

504. Now that binds the Postmaster to connect, by underground wires, any exchanges of the Telephone Company when asked to do so?—Yes, when they are situated in the same area.

505. Therefore, that does not require the consent of the municipal authority?—I am not prepared to say that.

506. Has your attention been called to that fact?—Yes.

507. In other words, the whole benefit of the provision of the 1892 Act is taken away from the municipal authority by the Telephone Company being able to require the Postmaster General to connect its exchanges; that is so, is it not?—Yes.

508. And the Postmaster General has not to get your consent, has he?—No, I do not think he has.

Sir *Julian Goldsmid.*

509. If the Postmaster General was going to work underground in your city, would not your municipal officers endeavour to arrange with his?—We should endeavour to arrange.

510. Would

Sir *Julian Goldsmid*—continued.

510. Would he not, as a matter of fact, ask you about it?—That is a question to ask the Postmaster General, and not me.

Mr. *Snape.*

511. Did you say the Post Office would have to come to your Corporation for consent?—That is a question which the Postmaster General alone can answer.

Mr. *Moulton.*

512. So far as that is concerned, all the powers of the Postmaster General can be used for connecting exchanges, can they not?—They can, according to Clause 12 of the Agreement.

513. You have told us that that is the use that is made of underground connection?—Yes.

514. Now, you have told us that the reduction to 10*l.* a year was made under threat of competition?—Yes.

515. And that, at a time when only a thousand subscribers were on the Telephone Company, the price was double?—The price was 20*l.*

516. Do you know how that competition was got rid of?—By their reducing their charges.

517. Was there any arrangement between the two companies?—Not that I know of; those things are generally kept secret.

518. You have told me that you have read this Agreement between the Telephone Company and the Postmaster General; that is so, is it not?—I have.

519. I believe in that Agreement there is absolutely no protection to the public as to the charges that can be made by the Telephone Company?—None.

520. Now, do you think that a satisfactory state of things for the public?—We do not.

Mr. *Benn.*

521. In answer to Sir Charles Cameron, you said, I think, that you had no fault to find with the proposed Agreement?—In regard to the special point, regarding which Sir Charles was questioning me (that is to say, reserving the rights of the Postmaster to grant licences when he chose), I do not profess to say that I approve everything in the Agreement. That was the point, I think, to which Sir Charles was speaking.

522. Supposing the Postmaster General declined to grant a licence to Glasgow, you would very seriously object to the Agreement, I think?—We would, in regard to such points as Mr. Moulton questioned me about just now.

523. Do you remember a document, which I believe was circulated by your Corporation; *that* particular memorandum; (*handing the same to the Witness*)?—I have seen this before, of course.

524. That was sent out as representing, I think, the views of your committee?—I presume it would be; it is not mentioned as such, but I have no doubt it was sent out. Very likely (I think) it was sent out by the convener of the committee; I do not remember it.

525. I just wanted to ask you whether one or two of the views expressed in it still represent the views of your Corporation; I find it says here: "The Agreement will, therefore, practically make the Post Office and the National Telephone Company partners in the telephone service, and will debar any other service from being possible, and will enable the company to continue the present excessive charges, in order to pay dividends and provide a sinking fund, on and for millions of capital which are largely unrepresented by any property of any kind." Is that still the view of your committee?—That never was accepted or approved either by the committee or by the Town Council. That is a memorandum issued by the convener of the committee to the committee, for the consideration of the committee when it came up, or for information to them when they should meet.

526. Can you tell me by whose authority it was circulated to the municipalities of the kingdom; did the convener send it out on his own responsibility?—Oh, no; it would be sent by the committee.

527. Then if it were sent out it would represent at that time the views of your committee?—Yes.

528. It would?—Yes.

529. In another part of the document I see it says here: "A grave crisis has thus arisen in reference to our future telephone system, which demands the immediate and careful consideration of Members of Parliament, of the London County Council, and of all Corporations and local authorities throughout the country, and unless steps are at once taken to prevent this proposed Agreement being concluded with the National Telephone Company, local authorities will find themselves hampered in their work, and the community saddled in perpetuity with a liability to pay charges calculated on the enormous capital created by the National Telephone Company, only a part of which has been expended on plant and property." Would that, do you think, represent your view at the time?—Yes, I think so.

530. The answer of the Postmaster General you regarded as "No," or as "Yes," to your application for a licence?—We regarded it as delaying it; declining it meantime; but as was remarked by a gentleman, a member of the deputation who moved a vote of thanks to Mr. Morley, we did not accept it as a final reply which would require us to sit still.

531. You considered it such a reply that it was necessary to move your Scotch Members to try, in the House of Commons, to convert the Postmaster General to your way of thinking?—Precisely.

532. Now, I want to ask you, with regard to valuable information you gave to the Committee as to the cost of a telephone service for Glasgow; you told us that, after careful consideration, you had come to the conclusion that an efficient service could be provided for Glasgow at 5*l.* per subscriber, or less?—Yes.

533. Supposing that you were allowed to organise this system for the convenience of Glasgow; suppose at the same time the National Telephone Company had their system, you recognise that some confusion might occur owing to there being, probably, a double set of exchanges?—Do you mean confusion in the transmission of messages?

534. For instance, one set of subscribers would be

Mr. *Benn*—continued.

be on one exchange, and another set of subscribers would be on another?—Precisely.

535. Notwithstanding that inconvenience, may I take it from you that Glasgow would be still glad to go forward with a system of its own?—Oh, yes.

536. "Yes"?—I think so.

537. In full recognition of that inconvenience?—I think so.

538. Therefore, the contention of the Postmaster General, that refusing a municipal licence to you would save you from any such inconvenience, would rather fall to the ground; you are prepared to put up with it?—We are, quite.

539. You were quite prepared to put up with it?—We would accept it; there would be mutual assistance from each company, or the Corporation and the company.

540. I rather gathered from your former answer, that if you got your licence for Glasgow, you would not be particularly concerned as to what happened to the rest of the country?—So far as the Corporation are concerned, we are only here as a deputation from them, applying for the licence for the local area, and I cannot give any opinion on the part of the Corporation with regard to trunk lines.

541. What I want to point out to you is this, that there are certain portions of the country which are not in the happy position of Glasgow, able to organise a system for themselves; in such cases all the evils which you in your memorandum attribute to the monopoly of the National Telephone Company would apply to these districts?—Yes; but the trunk lines are in the hands of the Government.

542. Yes, I am aware of that; but I want to point out to you that you in Glasgow may be in the convenient position of using a licence, and providing your subscribers with a *5l.* system, and other portions of the country may not be so happily situated; and may I ask you this, where such opportunities did not obtain as in Glasgow, do not you think that the terms of this agreement and the monopoly thus created would be a great hardship on those parts of the country?—I think so.

543. You think so?—I think so.

Sir *Julian Goldsmid.*

544. You were kindly telling us about the little event of your friend getting into a temper and smashing his telephone, because he could not get connection with the exchange, was it not?—It was the result of a series of incidents.

545. Did you take the trouble just to inquire as to the proportion of complaints to the number of messages telephoned at Glasgow?—That this individual had made, do you mean?

546. No, generally; the whole of Glasgow?—No, I did not.

547. You did not; and possibly that gentleman, being a little irascible, might have made more complaints than anybody else?—Anything is possible; but I know of a sufficient number of aggravated cases of complaint to satisfy me that it was not by any means a solitary instance.

548. Do you know the number of exchange calls in Glasgow in a day; have you any idea?—I would not like to say.

549. I have been given some figures upon that subject which are very interesting; I daresay you would take them from me, possibly?—Quite.

550. The number of exchange calls in Glasgow per day averaged last year 28,213?—I can quite believe that.

551. You can quite believe that?—Yes; that is about eight a-day to each subscriber.

552. In London the proportion is 29,700 calls, or to each subscriber 3·069; so that in Glasgow you are double as busy (about) as people are in London. Then the proportion of complaints, I understand, in Glasgow is 3·79; that would not show the enormous amount of difficulty that you speak of, would it?—If you mean by "complaint," writing a formal complaint to the company, that is quite a different thing from complaining and grumbling because there are difficulties and obstructions in the way; there are thousands of occasions for complaint when a formal complaint is not made to the company.

553. You think so?—I am satisfied of it.

554. Was it, as a matter of fact, at the beginning of last year that most of the complaints were made?—No, I am not aware of any particular time when "most of the complaints" were made.

555. Was it at the beginning of 1894?—I am not aware of that.

556. What was the period at which the smashing of the telephone took place?—About six months ago.

557. Therefore, you do not think there was any particular time at which there were more complaints than at others?—No.

558. You stated just now, in reply to Mr. Moulton, owing to a misapprehension, I think, upon the law, which is both unusual and astonishing on the part of so learned a counsel, that your Corporation had nothing to do with the Post Office, if they wanted to go under your territory. This is 26 & 27 Victoria, chapter 112, section 9; let me read you this: "The company" (that is now the Postmaster General) "shall not place a telegraph under any street within the limits of the district over which the authority of the Metropolitan Board of Works extends, or of any city or municipal borough or town corporate, or of any town having a population of thirty thousand inhabitants or upwards" (you are "upwards," I think, according to the last census), "except with the consent of the bodies having the control of the streets to within such respective limits"?—Is there nothing further in the clause?

559. The only further power is the power of appeal, in case of difference; from what you have said, I imagine you do not very often differ; you would not therefore maintain that the Corporation had no power after that has been read to you?—I think they have practically no power under that.

560. Will you kindly read it for yourself, if you will not believe my reading?—I quite accept your reading.

561. Clause 12 of the agreement says; "So long as this indenture is in force, the Postmaster General

Sir *Julian Goldsmid*—continued.

General will in any case, so far as it is practicable so to do (but not otherwise), at the request of the Company and upon such terms as may from time to time be agreed upon between the Postmaster General and the Company, connect by means of underground wires any two or more exchanges." Then the method of connection depends upon 26 & 27 Victoria, and 26 and 27 Victoria (in which "the Company" is now represented by the Postmaster General) prescribes the method in which the Postmaster General is to carry out this connection. Then the Postmaster General has to consult with the local authority under the clause which I have just read; and, subject to an appeal (with regard to points which do not affect the consultation), he "shall not place a telegraph under any street, within the limits of the district over which the authority of the Metropolitan Board of Works extends, or of any city or municipal borough, or town corporate, or of any town having a population of 30,000 inabitants or upwards (according to the last census), except with the consent of the bodies having the control of the streets within such respective limits;" therefore, reading you that, and pointing that out to you, do you still maintain, as against that Act of Parliament, that your Corporation has no power; perhaps you are not on the committee of the streets?—I am not on the statute labour committee.

562. Then perhaps you do not know?—Yes, I do.

563. You understand what I said to you with regard to complaints; I understand the figure is 3·79 per annum, the complaints of such subscribers. I just want to ask you this: have you really considered the disadvantages to a great many subscribers of being upon different telephone exchanges?—We have.

564. Now supposing, for instance, that a man is in a large way of business, and there are two sets of telephone exchanges, would it not almost be necessary for him to subscribe to both?—In several cases it might; but two subscriptions of 5*l.* each are just the same as one of 10*l.*

565. You are reducing it to 5*l.* Upon that you gave a quotation with regard to Stockholm which is often given. I should like to ask you whether you have made any inquiry which satisfies you that the conditions are the same?—The committee did make inquiry at the time, and got what they believed to be a satisfactory account of it.

566. Very well, then, I can ask you this question: do you know the area over which the telephones extend at Stockholm; let me just give you an example; in London it is 630 square miles; we were informed the other day that in Stockholm it is a radius of one mile; a very different thing to 630?—It is not a radius of 630 miles, is it, in London?

567. No; over the area?—And what is the area in Stockholm? It is not fair to compare the "area" with the "radius."

568. I assumed the other day that there were 10 square miles, but was laughed at for my want of knowledge in imagining that it was as much as that?—I understand it is 43.

569. Let me take 43; what is 43 compared with 630; it is not a twelfth of it; it is only just about a fifteenth?—It is a smaller place, of course, and the number of subscribers, therefore, would be proportionately smaller.

570. It does not follow. Then another question: are you aware at all of the difference between the wages paid to operators in London and Stockholm?—Yes, I am quite aware there is a difference.

571. Do you know what the wages of the operators in Stockholm are?—I do not know at all.

572. Would you be surprised to hear that the wage is under two shillings?—Two shillings?

573. Under two shillings?—Per day?

574. Per day?—No, I would not be surprised to hear it, if you say so.

575. Well, I do say so. In London it is nearly five shillings, is it not, and, I suppose, in Glasgow, too; no Scotchman would be paid worse than an Englishman, I imagine?—I think they are.

576. Then another question: are you satisfied that the whole of the circumstances have been explained as to why the reduction of price was made?—In Glasgow?

577. Yes; you say it was because of the threatened competition?—Yes.

578. Was it not a fact also that the patents expired, which made a great difference?—The patents did expire.

579. Ought not that to be mentioned to the Committee also?—There was no word of reduction until a large number of citizens signed that agreement in connection with the proposed opposition, and then the price came down.

580. Was it then, also, that the patents expired?—The patents had been out for some time, if I am correct.

581. For how long?—I could not say.

582. You do not know?—I do not know.

583. But you know that they did expire somewhere about that time?—Some time prior to that.

584. Naturally, if it was not after?—That is so.

585. Then, next, all the subscribers, you say, or many of the subscribers, may have to subscribe to both telephone systems if you have two?—Yes.

586. What would you do, for instance, for those who had taken a subscription for five years with the existing company?—I beg your pardon.

587. By-the-by, with regard to the patents expiring, I will just add one other question: was it a fact that the reduction of price at Glasgow when the patents expired corresponded with the reduction of price all over the country upon the same ground?—I do not know of any reduction all over the country.

588. You did not know of that?—No.

589. I am afraid Glasgow did not concern itself with that?—No, not particularly.

590. Certain subscribers, we were told the other day when you were not here, took out five years' subscriptions to get better treatment from the National Telephone Company; what would you propose to do for those subscribers if there

Sir *Julian Goldsmid*—continued.

is to be a new system?—I am not aware that they exist to a large extent in Glasgow.

591. It was understood so. I do not know that it specially applied to Glasgow?—It is Glasgow I am speaking about, and Glasgow only.

592. You think that the Glasgow citizens do not subscribe for five years?—I am not aware that they do.

Mr. *Tully.*

593. We were told a minute ago that you are doubly as busy in Glasgow with the telephones as the subscribers are in London; that is accounted for because the price is exactly half what the price is in London; is that so?—I am quite satisfied that that is the explanation.

594. If there was competition by the Corporation and the price was reduced, as you say, would a greater number of people use the telephones?—Undoubtedly.

595. What would be the effect of a greater number of people using the telephones on the postal service or on the telegraph service?—It depends, of course, upon the proportion between the increase in the number of subscribers and the decrease in the amount of subscription; but I have no doubt the revenue to the Post Office would be larger.

596. We were told here the last day we met that in 1891 the telegraph service paid a surplus of 68,000*l.*, and that in 1894 the telegraph service had to put up with a loss of 240,000*l.*, and that that was largely due to the telephone service. If you say that in Glasgow and in other towns where the corporations would compete, a greater number of people would use the telephone, would that cause a greater loss to the telegraph service?—I do not think it would. I understand that the apparent loss to the telegraph system is because they pay out of revenue each year.

597. They paid out of revenue in 1891 as well as in 1894; that gets rid of that; and they had a surplus in 1891, and a deficiency of 240,000*l.* in 1894?—Yes, but it is an evident impossibility to draw a comparison between two years as to the revenue, unless you know what the revenue expenditure, as apart from the capital expenditure, was in each year.

598. We were told that it was very much the same?—You have not a fair basis of comparison.

599. We were told by an expert witness that this great loss was due to the telephone service being largely expanded. I want to know this: if the telephone service is more extended by the Corporations getting licences and reducing prices, how would that affect the telegraph revenue?—I have already said that I believe the increase in the number of subscribers would be so large that the revenue of the Post Office would not suffer.

600. When persons use telephones in the towns they do not send telegrams to each other; they give up sending telegrams?—That is quite true; I can quite understand that there may be a diminution in the number of telegrams that will be used.

601. The point I want to come at is this: that if the price for the telephone service is reduced there will be a greater number of people using it and therefore there will be less telegrams sent

Mr. *Tully*—continued.

in that town?—There is no doubt that that will follow to a certain extent, but inasmuch as telegrams are (in Glasgow, at all events, which is so much less in area than London) not so frequently sent from one part of the city to another, and as the trunk lines are under the charge of the Government, it will only be telegrams from Glasgow to another city, and they will not be affected.

602. So your view is that if the Corporation of Glasgow got this licence, and the telephone service became more extended in Glasgow because of the cheapness by reason of the competition, the telegraph service would not suffer in its revenue?—I do not think it would suffer much; I do not think that the amount of telegraphic communication between different parts of the city can be a very great source of revenue in Glasgow.

603. So that it is your view that the Postmaster General in refusing you a competing licence in Glasgow could not refuse it on the ground that the increase in the telephone service would diminish the receipts to the telegraph service? I do not think so.

Mr. *Snape.*

604. Is it the intention of the Glasgow Corporation if the licence be granted to them, to establish a local exchange on their own account?—The Corporation have authorised the committee to apply for a licence.

605. That is not an answer to my question: are they merely asking for the licence to protect their interests or with the intention of acting upon it?—I have no doubt what their intention is, but I can only speak of what they have actually decided on.

606. You say you have no doubt of what their intention is; what is that intention?—Speaking for the committee I can say that the committee certainly purpose asking the Corporation to use the licence, the moment the licence is granted.

607. Do they intend to use it simply for the purpose of evading the payment of this 1,600*l.* or to give the public the advantage of it?—Oh, it is for the advantage of the public.

608. If the effect of the licence when it was obtained was to lead the National Telephone Company to reduce its charge to 5*l.* would the "intention" still remain on the part of the Corporation to use it?—I could not answer that question at all; I could not answer a hypothetical question as to what a fluctuating body like a Corporation might do in given circumstances.

609. Do you think it probable. You say you have no doubt of their present intention or of the intention of the committee: what is your view as to that?—Well, I really cannot answer more than I have done. A reduction in price that was not accompanied with an infinite improvement in the service would not satisfy our Corporation, no matter what the price was.

610. In that case the difficulties and inconveniences of a dual system existing would not prevent your carrying out the intention if it were deemed, on account of the defective service, to be desirable, even though the price were reduced?

Mr *Snape*—continued.

duced?—I have already referred to the unwillingness of the Corporation to give the control of their streets to a company.

611. I will come to that in a moment?—And that would hold good, no matter what the price was.

612. Supposing that you had the licence, had acted upon it and established the system, and it became desirable for the Government to take over the right of the municipality eventually, would you be prepared to surrender that licence without asking the Government to do more than recoup the actual outlay they had made?—I am quite satisfied that the conditions the Corporation would seek to have imposed would be very reasonable. I would not like to say that that alone would be all that the Corporation would ask; for example, it would depend on the length of time we had had it established. There might be some of the servants as to whom we might expect to see that their interests were preserved, or something of that kind; but I am quite satisfied that there would not be the slightest difficulty raised on the part of the Corporation to any conditions which business men would be disposed to recommend.

613. Then, as to reasonable conditions of transfer, I take it that, after protecting such vested interests as you have indicated, the Corporation would not expect anything for goodwill?—No, nothing for goodwill; I think I can take it upon me to say so; I know the Corporation sufficiently to know that.

614. If the Government were to find it necessary to take over the system eventually, those difficulties of the control of the streets would arise, I suppose, with reference to the Government interference as well as with reference to the interference of a private company?—Well, there never could be the same objection on the part of the Corporation to the Government that there is to a company trading for private gain.

615. Then you do not think that would be an obstacle to the Government taking it over?—No, I do not think that would be an obstacle.

616. In estimating that you would be able, probably, to reduce the charge to the extent that you have told the Committee, have you taken into account the difference in wages to which Sir Julian Goldsmid referred?—Yes.

617. You think that with that difference you could still, if you had the system, by your cheap raising of funds, reduce the price?—The Committee are quite satisfied of that.

Sir *James Fergusson.*

618. Your exchange just now under the National Company embraces, you have said, some of the suburbs as well as the municipal burgh of Glasgow; your proposed exchange would be confined to the municipal area, would it not?—In all probability, unless arrangements were made with the suburbs.

619. You are aware that by the agreement between the Post Office and the National Company it is intended to give a very extended area for the Telephone Exchange. Are you aware of that?—Yes.

620. Including the city, the burghs of Rutherglen, Govan, Pollockshaws, Partick, and the



Sir *James Fergusson*—continued.

adjoining area, including Kirkintilloch and Cambuslang; that, if the service was given would be a great boon, would it not?—Undoubtedly.

Mr. *John Ellis.*

621. I want to get, if you please, something a little more definite with regard to what you have called the unsatisfactory service: you come before us, I think, as chairman of the committee of the Glasgow Corporation?—I am not chairman of the committee; I am a member of it.

622. It was appointed in April 1893, and it asked for the licence in July. May I ask you how many sittings that committee had, without binding you to a particular figure?—We met pretty frequently.

623. Did you meet once a week during that time?—Oh! no; we did not meet once a week.

624. Can you give me an idea as to how many sittings you had?—No; I think we met eight or 10 times.

625. That will be sufficient for me. Did you call any evidence before you as to the state of the service?—No.

626. You had no evidence before the committee, from the inhabitants, as to the state of the service?—No; each member of the committee had his own experience, the experience of his own circle of friends, and each member of the committee is a representative of the city, and has abundant opportunity of knowing the views of the citizens.

627. You consider that the members had sufficient personal knowledge to enable them to dispense with the necessity of any evidence?—Yes.

628. Are you a practical user of the telephone, may I ask?—Do you mean to say, have I a telephone in my office?

629. Yes?—I have.

630. You have found it a very great convenience, have you?—I have found it a very great annoyance.

631. In what respects?—Just the respects I have already named; the ringing for a long time before you get the connection, getting sometimes the wrong connection, being told again and again and again that the party is engaged, and then when you meet the party and taunt him with having used his telephone a great deal he will tell you that he has never used it at all that forenoon.

632. And that experience of yours was confirmed by your colleagues?—Yes, it was.

633. And that was the ground, I gather, of your application to the Post Office?—That was one of the grounds; the other was the expense.

634. That it was a costly service and an unsatisfactory service?—Yes.

Sir *Charles Cameron.*

635. Mr. Benn called your attention to a circular issued by the Telephone Committee expressing certain views. Are you aware that the date of that circular is the "1st September 1893"?—Yes, I presume it is.

636. Since then you have had a very considerable amount of information which must have modified to a certain extent the views expressed in that circular; is that so?—Yes, that is so.

Sir *Charles Cameron*—continued.

637. Then I wish to ask one further question: Mr. Benn pointed out that there must be a number of Corporations who are not in the position of Glasgow or other Scotch Corporations, who could undertake the working of an exchange, and I think he asked you: Would not they be left out in the cold under such an arrangement as this; but you are in favour of competition, are you not?—We are.

638. Are you aware of the distinct statement in favour of competition in the Treasury minute?—Yes.

639. Will you kindly read that statement from Article 19, page 6?—"As to fresh licences, no further licence for the whole country will be granted; and even for a licence to establish an exchange in any particular town, no application will be entertained unless a formal resolution in its favour has been passed by the Corporation, or other municipal authority, and evidence given that there is sufficient capital subscribed to carry out the undertaking. In this way competition will not be excluded, but a check will be imposed on the formation of companies whose sole object it is to force the existing licences to buy them up. But although this is the policy which commends itself to Her Majesty's Government, it must be distinctly understood that should licences hereafter be granted on other principles, no company now or hereafter to be licensed will have any ground to complain of breach of contract, or want of good faith on the part of the Postmaster General. It will be a condition of any licence to a new company that their system must be constructed entirely of twin-wires, or metallic circuits, so that there may be an assurance of its efficiency."

640. Well, that points to an admission of the principle of competition, does it not?—It does.

641. It points to the desirability of the twin-wire system, and it points to the control by the Corporations?—Yes.

Mr. *Tully.*

642. How far is the Liberal Club in Glasgow from the Central Hotel?—I think about 300 yards.

643. This is an experience that happened to myself in Glasgow last January, and I suppose it is an experience that other people have had in Glasgow; if you attempt to use the telephone from the Liberal Club to the Central Hotel, you cannot make the connection in sufficient time; you can walk in less time than that to the hotel; would not that be quite so?—I quite believe it.

Mr. *Benn.*

644. With reference to the document to which Sir Charles Cameron referred, which was circulated to the municipalities since that date, are you aware of any other document sent out by your committee intimating to the municipalities that you had modified your views from those of the original document?—We have certainly never called attention to any modification, but we have sent out other documents, the tendency of which is perhaps slightly different from that, but not calling attention to any modification of view.

*Chairman.*

645. You referred to the answer which I gave to the deputation from the Scotch municipalities as having left some doubt in the minds of the deputation whether it was a definite refusal to the application that was made?—Well, I am sorry if I have conveyed a wrong impression. We regarded it as definite enough in the meantime, but temporary.

646. Definite in the direction of refusal?—Definite in the direction of refusal.

647. And it led you, you say, to take steps to protest as to the rights which were reserved under the agreement?—We took steps in order to see that the Postmaster General should exercise the rights which were reserved under the agreement.

648. You are aware of course that if I had given a licence to the Corporation of Glasgow they could not have opened exchanges without Parliamentary sanction, by either a public or a Private Bill?—If that is so, we would have been quite prepared to come to Parliament.

649. You are aware of the fact that the Corporation has no power which would enable it to carry out an exchange under such licence, and that it would have had to come to Parliament for Parliamentary sanction to enable the Corporation to carry on telephone business?—I believe that is a question with regard to which there is some difference of opinion; but even if it were absolutely necessary to do that, there would have been no difficulty on the part of the Corporation coming to Parliament and asking for the requisite statutory powers.

650. Do you say that you are advised that there is a doubt as to whether the Corporation could carry on telephone business without seeking special powers?—I do not say that we have taken the advice of counsel upon the subject, but amongst the members of the Corporation themselves there is a difference of opinion; some holding that we have at present the power, and some denying it.

651. You have not taken steps to get a definite opinion upon that point?—No, we have not.

652. Would your proposal be, if you came to Parliament, to deal with the Telephone Company in Glasgow as you have dealt with the water companies and the gas companies; that is to say, to buy them up?—Oh, no; I have no idea that we would propose that.

653. It would be to open a competitive system against them?—Yes. If the Telephone Company at present had what the water and gas companies did have, the right to lay their pipes (their mains) under our streets, it might be necessary then that we should take steps to get them deprived of that right, and so put them out; but there is no inducement to us whatever to buy the company at present.

654. Do you contemplate as the result of a municipal telephone a continued system of competition, or that you would gradually drive the company out of the field?—We look forward to the expiry of the licence, when the Government possibly may take the whole thing over, and we would be quite prepared, I daresay, to have the benefit of competition during the 15, 16, or 17 years which the company still have of their licence to carry on.

655. You say the "benefit of competition"; what do you mean by that phrase?—Well, there would be a desire on the part of each of two competing

*Chairman*—continued.

competing parties to provide the most effective service, with the most recent instruments possible, and so secure the goodwill of possible users.

656. Would you call it a benefit that there were two competing systems in which the subscribers on the one system might not be able to communicate with the subscribers on the other system?—There are drawbacks, of course, as I have admitted, but there are also advantages in the direction that I am speaking of, and the drawback of requiring to subscribe to two companies would be very much lessened if each of them was to be at very much less price than the present charge for one.

657. That is not, of course, the opinion of the Corporation as a whole?—The Corporation, as a whole, has come to no opinion on anything further than instructing the committee to apply for a licence.

658. And there is a difference of opinion in Glasgow, as evidenced by the papers in Glasgow, as to the advisability of a municipal licence being granted?—I have no doubt there is a difference of opinion.

659. Do you think it would be an advantage or a disadvantage that there should be two net works of telephone wires starting from two centres in the town?—In itself, if that were the only element, it would not be an advantage.

660. It would be a disadvantage?—Yes, if that were the only element in the case.

661. Have you formed any estimate, or have you taken steps to get information as to the number of subscribers a municipal system would secure?—No, nothing further than the estimate that one can form from past experience, that the number doubled or trebled when the price was reduced.

Mr. *John Ellis.*

662. In spite of the grumbling?—In spite of the grumbling.

*Chairman.*

663. Sir James Fergusson asked you a question about area for which you proposed the licence should be granted; I suppose you are aware that the telephone is made use of considerably by merchants and others who have offices in the borough to their houses outside the borough, in the suburbs?—That exists to some extent doubtless.

664. And that that is a very substantial part of the use of the telephone?—I do not think it will amount to a very large number, but still it does exist; there is no doubt about that.

665. And a municipal telephone would not be able to supply a service of that kind?—Not without an agreement with the National Telephone Company or whoever had charge of the area within which these parties reside.

666. And of course you are aware that the National Telegraph Company could if they chose (I do not say they would), refuse to come to an agreement of that kind?—They could, but it would be their own interest to come to an agreement.

667. You mentioned an estimate of the cost of installing a municipal service; was that an estimate of a single or double wire service?—A double wire service.

*Chairman*—continued.

668. Who was the estimate made by, was it by some one experienced in telephone work?—Yes; it was an expert. I cannot say at this moment who it was. The convener submitted the price to the committee at the time (in July 1893), but I have not the detail with me, and I cannot say who it was; but it was a detailed estimate which the committee quite accepted as authentic.

669. Was any total figure given for supplying a given number of people?—I can say no more than the minute that is before me; that says: "Reliable estimates in detail have been prepared, showing that, for a capital of about 15*l.* per user, the latest and best system can be laid down in Glasgow within the municipal radius." Further particulars than that I have not before me.

670. And you have had no practical experience yourself in work of that kind?—No, I am not at all an expert in the matter.

671. You mentioned as one of the principal reasons which led you to approve of a municipal system, that in order for the company to provide an effective service it must have the control of the streets?—Practically so.

672. Are you aware that the company has come to terms with the Corporation of Manchester under which arrangement the Corporation do all the underground work themselves and the company do not interfere with the streets at all?—Yes.

673. Would not that be possible in the case of Glasgow, and so maintain the absolute control of the streets in the hands of the Corporation?—No; I do not think the Corporation of Glasgow would like that.

674. But it would be a possible course?—It would be a possible course.

675. As an alternative to a municipal system?—It would; but still under that system the Corporation would be bound whenever the company asked them, to break up the streets in order to secure the company's desire.

676. Wherever the Corporation were satisfied that the work was necessary in the interest of the inhabitants, the telephone subscribers?—Yes.

677. You mentioned a statement made by Mr. Goschen in the House of Commons to the effect that it was suggested that the local authorities might be willing to undertake the telephone business and that he saw nothing contrary to the Government's policy in such a proposal?—I read that.

678. Would you just read the next few words if you have them?—I have not. I have handed in my extracts.

679. I will read them and perhaps you will take them from me. "If there were a town in which a telephonic system had not been established, and in which the local authority wished to undertake the system, there was no reason against such a course, the communication with the rest of the country being established by the trunk lines in the hands of the State." So that Mr. Goschen's statement which you referred to goes only to the case of a town in which there was no telephonic service in existence?—That last clause does; but it does not necessarily carry the reference back to the preceding clause, does it?

*Chairman*—continued.

680. It is consecutive; it is the next paragraph; so I think we may take it that Mr. Goschen's statement referred to a town in which there was no telephonic service in existence?—I did not so read it.

*Chairman*—continued.

681. I was going to ask you a question about the matter Mr. Moulton examined you about, but I think I understand that you have not gone carefully into that question?—I have not.

Councillor JAMES COLQUHOUN, LL.D., called in; and Examined.

Sir *Charles Cameron.*

682. YOU are a Solicitor in Glasgow, and an LL.D. of Glasgow University?—That is so.

683. And you have been in the Town Council of Glasgow for 12 years, you have been a magistrate for three years, and you are at present one of the judges in the police courts of Glasgow?—That is so.

684. You are also a member of the Telephone Committee that we have been informed of by Bailie Chisholm?—Yes.

685. You corroborate, I suppose, generally, what he said as to the unsatisfactory nature of the telephone service in Glasgow?—Entirely.

686. Do you think he put the dissatisfaction sufficiently strong?—Well, I can give my experience of the telephone in connection with my own firm during the past eight days. I have been taking special note of it with a view to being able to speak fairly about it to-day. Last week, on three days out of the six, the telephone was practically not working to any useful purpose.

687. In what way?—Well, we could not in many cases get the connection with the Exchange when we rung up. When we succeeded we were told that the wire we wanted was engaged when it was not so, and if we got the connection with the people that we wished to communicate with, we found that the sounds coming along the wire were so faint and so mixed up with other conversations passing along the wires that it was impossible to make out the messages, and in one particular case I had to send round a messenger to see what a gentleman meant by his communication, it was so indistinctly delivered.

688. That is your personal experience in the last eight days?—Yes.

689. That is corroborated, I suppose, by all the hearsay evidence?—No one can speak with a telephone subscriber in Glasgow without hearing similar statements of the inefficiency and delay that takes place.

690. The Corporation, we have been told, are very large telephone users, and their experience, the experience of members of the Corporation, influence them in the action they take on the matter?—Very largely.

691. Your firm, Messrs. J. and D. T. Colquhoun, are, I believe among the original subscribers to the telephone service in Glasgow?—Yes; we adopted it when there would be, I suppose, only two or three others connected with the Telephone Exchange.

692. And the service then provided was not that of the National Telephone Company?—No, we got the supply from Messrs. Graham, electrical engineers in Glasgow.

693. Before we go on to that, did you happen to be among the subscribers to the Telephone Exchange of Mr. Symington?—No, I was not on the A. B. C. Exchange, but I knew about it.

694. You knew about it?—Yes.

Sir *Charles Cameron*—continued.

695. And you knew that when a superior service came in he was refused a telephone licence; are you aware of that?—I do not know whether he applied and was refused, but I know that he did not get one.

696. What was the charge of Messrs. D. and G. Graham?—£12.

697. And they were bought up by the National or some other company, were they not?—I do not know whether they were absorbed directly by the National or whether they went into another company, which, in its turn, was swallowed up; but they ultimately became connected with the National Company.

698. What did the National Telephone Company charge?—£20.

699. Did you get the benefit of the old rates?—Yes, we were continued at the 12*l.* I believe they tried to raise it in connection with our firm, but I told them to take the telephone away, and rather than do that they allowed us to have it at the old price.

700. They found it necessary, however, to charge, or they did charge 20*l.*, whereas the old company had supplied you for 12*l.*?—That is so.

701. Was the service supplied superior to that of the old company?—My recollection is that the connection we had with the telephone system of Messrs. Graham was better than anything we have had since.

Sir *Julian Goldsmid.*

702. Can you tell us how many subscribers there were?—I do not suppose there would be more than half-a-dozen when we joined, but they ultimately had a considerable number.

703. How many?—Several hundreds.

Sir *Charles Cameron.*

704. At all events you were connected at 12*l.* and the public were charged 20*l.* The charge is now 10*l.*?—Yes.

705. How was that brought about; can you tell us?—The dissatisfaction with the telephone system in Glasgow became so great, some considerable time ago, that a number of gentlemen met together and resolved that they would if possible get a remedy; and communications were opened up with the Mutual Telephone Company of Manchester, who held a licence for the whole country.

706. About what date would that be?—I cannot give the year.

707. Not many years ago?—Not many years ago. The result was that circulars were sent round, and I believe in response to the first circular, between one and two thousand replies were received from parties who stated that they would connect themselves with the Mutual Telephone Company's exchange if it were established. Shortly after that, the rate of the National

Sir *Charles Cameron*—continued.

National Telephone Company was reduced to 10*l.* and promises were made that the system would be greatly improved; they were to provide another switch-board, which would prevent all blundering and irritation for the future; and with these promises, and with the great reduction in the price of the telephone, the gentlemen who were acting in the matter resolved that they had accomplished their object, and would go no further in the meantime.

708. And another permanent obstacle was interposed, was it not, by the absorption by the National Company, or by some other Company which has since been swallowed by the National, of the concern to which you refer?—I understand the Mutual Company sold its business to the New Telephone Company.

709. Which sold its business, or went in liquidation?—I understand there was a penal clause in the agreement by which the New Telephone Company was to pay 15,000*l.* to the Mutual Telephone Company, in the event of their allowing themselves to be bought up. The National Telephone Company has practically become the New Telephone Company by acquiring the shares of that Company, and they simply did not absorb the New Telephone Company, in order to escape the payment of this 15,000*l.*

710. Now Bailie Chisholm was cross-examined about the benefits of competition, and he was asked whether he believed in the benefits of competition. When these 2,000 gentlemen in Glasgow signed this invitation, as it were, to the Mutual Company, or some of its people, to start a rival exchange in Glasgow, do not you think that that was tolerably good proof that they were prepared to face any disadvantages it might involve, and that they thought that competition would be a great advantage on the whole?—It will be the best of all proofs that in the event of our getting the licence for which we are applying, Glasgow will have both a good service and a cheap service.

711. As to the disadvantages of competition, are you aware that in some towns there is competition between the National Telephone Company and Post Office Exchanges?—I am not personally aware of that.

712. One of the reasons of which you wish to speak, or for which the Glasgow Corporation wish to acquire the telephone system, or at all events to have a telephone system with the twin wire, is connected with the tramways; please explain how that is?—Yes; the Glasgow Municipality are not only the owners of the tramway lines, but by special power obtained from Parliament we have the privilege of working the tramway car service ourselves. In our Bill, I think of 1891, we got power to work the tramway system by electricity. The Telephone Company objected to our getting that power, unless on condition that we would come under an obligation to do whatever was necessary to absolutely protect their overhead wires.

713. They proposed that the Corporation should be at the expense of providing for the necessary insulation, and the result was that, for the present at least, the idea of the overhead electrical system in connection with the tramway system had to be given up?—When we came to



Sir *Charles Cameron*—continued.

consider the expediency of introducing an electrical tramway service, we found that the cost of insulating the wires in order to absolutely protect the National Telephone Company was so great that for the present it was not possible to have an overhead tramway electrical system; and that gave us the most absolute proof of the inexpediency of allowing any private company to acquire any right over our streets. The National Telephone Company is a private company working for its own gain, and yet they have, by taking possession of our streets, put the Corporation in this position; that when they come to ask for power from Parliament to use their own streets, this private company says to the Corporation: "You can only use your own streets, on condition of making compensation to us for any damages that we may sustain through your action."

714. The Postmaster General would like you to explain the phrase you use, "taking possession"?—By "taking possession" of the streets, I mean that they have run their wires in every direction across the streets of Glasgow, and it would be hardly possible for us to run an electrical tramway along any street in the city, without subjecting the overhead telephone wires to being influenced by the electrical wires of the tramway system.

715. That occurred some time ago, did not it?—Yes. I may say, though, that that point has been got over by our having now the protective clauses of the Board of Trade introduced into our last Tramway Act, by which, if the Telephone Company do not adopt the twin-wire system within two years, the Corporation will be freed from any responsibility in that direction.

716. That is to say, you found yourselves headed by this obstacle before the Board of Trade clauses were settled?—I believe we would have had an electrical tramway system in Glasgow by this time but for the protective clause of the Telephone Company in our Act of 1891.

717. Now, will you explain the financial position of the Corporation which would give it a special advantage in connection with the telephonic arrangements of the city?—The Corporation of Glasgow in its corporate capacity, apart altogether from any monies it might raise by taxation, has a very large capital fund called the "Common Good," which could be made available for providing the necessary capital to work the telephone system.

718. The "Common Good" is an accumulated fund, regarding the disposal of which the Corporation has very great latitude, is it not?—Yes; amounting at the present time to close on a million of money.

719. So that money could be raised on most advantageous terms?—The Corporation just now is borrowing money at 2 per cent.

720. And there is no scarcity of money at that, I suppose?—None whatever.

721. I need not trouble you about the absorption by this National Company of all the previously existing companies; we have had evidence about that, and the obvious deduction that you would make as to the huge capitals; but you believe that the telephone communication, the monopoly,

Sir *Charles Cameron*—continued.

should be in the hands either of the Government, or, if that is not convenient to the public, then of the municipality?—Certainly; or if the monopoly is to be left in the hands of a private company, such as the Telephone Company, it should only be under such conditions as to efficiency, and maximum price, as would prevent the public from being victimised.

722. But you do not ask for monopoly?—Certainly not.

723. You are quite prepared for competition?—Quite; and I have not the least doubt that if we got the licence we would be quite willing, and no doubt the National Telephone Company would be quite willing, to work in a friendly way; they would hardly cut off their nose to spite their face.

724. Do you see any practical difficulty in working two telephone companies in the same way?—None whatever. We see three telephone systems working in Stockholm, and the reports from that town are that the business works well enough; there is interchange of messages between two exchanges; and the State Exchange (which is the third one) can be used in connection with either of the other two on payment of a small way-leave.

725. And as to the terminal charges, if the Corporation were working its exchanges it could either arrange for reasonable terminal charges with the rival Exchange, or it could arrange for the interchange of messages free?—Precisely so. I believe there are two exchange systems working just now in Manchester. The New Telephone Company, which is, practically, the National Telephone Company, keeps up a system of subscribers of its own, and the National Telephone Company have their own exchange; the subscribers to the one being charged 8*l.* 10*s.*, and the subscribers to the New Telephone Company under their contract with the "Mutual" being charged only 6*l.*

726. Do they interchange messages?—I cannot say; but I understand that both systems are working quite smoothly there.

727. There is nothing to prevent the interchange of messages?—Nothing.

728. Your Corporation, the Glasgow Corporation, is on friendly terms with other Corporations?—Perfectly.

729. And if other Scotch Corporations were to get licences, and start telephone exchanges, I suppose you could say confidently that Glasgow would be prepared to treat with them for free interchange, free of terminal charges?—It stands to reason that we would make an arrangement for the interchange of messages by means of trunk wires with other Corporations having exchanges.

730. Then you can bear out, I suppose, the opinion expressed by Bailie Chisholm, that the Glasgow Corporation would be prepared to take a licence terminating at the same time as the existing licence of the National Company?—Certainly.

731. And that it would be prepared, in case of a national assumption of the telephone system, to hand over its system without any idea of profit?—A Corporation such as ours would never expect

Sir *Charles Cameron*—continued.

to be paid anything for goodwill of the business by the Government in the event of the system being taken over. I do not see why the telephone business should not be put very much on the same footing as tramway enterprises, which Corporations are entitled to take over; they are entitled to take them over without paying anything in the shape of goodwill, and a similar stipulation could be made in connection with the telephone system if taken over by the Postmaster General from municipalities.

732. The usual custom that attaches to the working of municipal enterprises in Scotland is, that all profits are applied to the reduction of rates; that applies in the case of water, I understand, gas, electricity, and so forth?—That is so.

733. And the same rule would be followed in connection with the telephones?—Precisely.

734. You have heard a number of questions put to Bailie Chisholm about the wayleaves and the rights of the Postmaster General and the obligation he is under to put those rights, in respect of wayleaves, at the disposal of the telephone companies?—I have.

735. You are a lawyer, and I understand you have looked into the matter; therefore can you give us your view of how it stands?—Practically in my opinion the Postmaster General has the right to use our streets. The right, of course, is said by the Act to be subject to the consent of the municipality; but there is a power of appeal to the sheriff, or in certain cases, to the Railway and Canal Commissioners, in the face of which appeal it would not be possible for the Corporation to refuse the demand of the Postmaster General to open our streets.

736. And that right under this agreement the Postmaster is bound to place at the disposal of the telephone companies for the connection of exchanges in the same way, is he not?—I gathered so from Mr. Moulton's questions.

737. That right is nominally subject to the veto of the town council, but the consent must not be withheld on (I think it is) "unreasonable" grounds; and there is a right of appeal to the sheriff which you have explained?—That is so under the Act of 1878. I have the Act here, and can read the section if desired.

738. There is no absolute vetoing power at all in the town council; the absolute vetoing power really lies with the sheriff after a provisional veto has been given?—That is so.

*Chairman.*

739. The absence of veto only exists where the Postmaster General exercises the powers which the statute has conferred upon him; is not that so?—That is so.

740. Where he delegates any powers which he has to the company or to any licensee, then the veto comes into operation at once?—The veto in that case is absolute by the Act of 1892.

Sir *Charles Cameron.*

741. But there is an undertaking on the part of the Post Office, is there not, Section 12, page 19?—It would appear to be so.

742. Will

Mr. *Moulton.*

742. Will you look at Section 12, page 19?—"So long as this indenture is in force the Postmaster General will in any case so far as it is practicable to do (but not otherwise) at the request of the company and upon such terms as may from time to time be agreed upon between the Postmaster General and the company connect by means of underground wires any two or more exchanges of the company situate in one and the same exchange area." There is no doubt that under that clause the Postmaster General is to do the work; and the Postmaster General, doing the work directly and not through any delegate, he has the right of appeal in the event of the Corporation refusing their sanction.

Sir *Charles Cameron.*

743. And he is bound to do the work at the request of the company, is he not?—So says the agreement.

744. So that the effect is precisely the same as if he were to give the power to the licensee?—By this clause practically the absolute veto which is secured to the Corporations in the case of licensees of the Post Office under the Act of 1892 is got over.

*Chairman.*

745. Perhaps I may supplement that by another question; that only applies to what we call "junction wires," connecting exchanges, and in any area where there is only one exchange, it would not come into operation at all; is not that so?—The words of the 12th section are: "connect by means of underground wires any two or more exchanges of the company situate in one and the same area."

746. It is confined to connecting between exchanges, is it not, and not wires between exchanges and subscribers?—I suppose that is the interpretation of the section.

Mr. *Moulton.*

747. I suppose you would agree with the last witness that any such wires would in practice require to be underground between exchanges, and that the wires from the separate houses to the exchanges, it would not be worth while putting underground?—Not necessarily.

748. The main use of the underground wires is between the separate exchanges?—Yes, that is so.

749. So that, so far as the chief interference with the streets is concerned, this clause of the agreement gets rid of the proviso as to the veto of the local authorities?—I think so.

750. Now would you kindly look at Clause 5 of the 1892 Act?—Yes, I have it.

751. I want you just to say whether this is the effect of it: this gives to licensees the powers of the Postmaster General under the Telegraph Acts of 1863 and 1878, subject to a veto of the municipality?—That is so.

752. The effect of Clause 12 of the agreement is to get rid of that veto in the case of wires between exchanges?—Precisely.

753. And those, as you have told us, are the important underground wires?—Yes.

Mr. *Moulton*—continued.

754. Now I believe you have given a good deal of attention to the question of telephones. In your opinion are telephones a great social convenience, rapidly becoming a great social necessity?—Oh, they are a necessity. Even with the disturbances and the inconveniences, and inefficiency of my telephone, I should not like to give it up.

755. You have told us that if a social necessity like this is to be in the hands of a private company, which is practically a monopolist, there ought to be conditions as to efficiency and maximum price?—I think so.

756. In your opinion ought those to be sufficient to secure an effective service at a reasonable cost?—Certainly.

757. Now, are there any conditions (other than the possibility of competition which I will deal with directly) in this agreement which either secure the public from exorbitant prices or which secure them an efficient service?—I have not found any in any of the documents that I have seen.

758. Do you believe that you can in our populous towns get an efficient service without metallic circuits?—Well, not being an expert, I cannot speak from my own knowledge; but I remember reading a statement by the Chairman of the National Telephone Company when he was examined before a Committee of the House of Commons; he made the statement quite distinctly that nothing but a twin-wire system would ever give an efficient service.

759. Next as to price: It has been suggested that there was a considerable lowering of the price in London when the patents expired; I do not know whether you know the London prices?—I do not know the London prices.

760. But so far as Glasgow is concerned, you think it was the threatened competition that did it?—Oh, undoubtedly; the running out of the patents had nothing to do with it.

761. I may take it that all patents necessary for working these telephone exchanges have expired by now?—I believe so.

762. Your Corporation, you have told us, came to the conclusion that with a rental of 5*l.* they would be able to make the thing pay?—Yes; the convener of the telephone committee of the council stated quite distinctly that he had gone into the thing in detail; and it is no secret that he got his information from Mr. Provand, the Member of Parliament for the Blackfriars and Hutchesontown division, and that the estimates were based upon the actual experience of the Mutual Telephone Company of Manchester.

763. Some questions have been put to you in this inquiry as to the drawbacks of competition. If competition is an inefficient check to these abuses then the general public have no protection whatever under this agreement, have they?—Absolutely none.

764. Now, let us take the case of the inhabitants of a town, I will take a city like your own, Glasgow; in your opinion is the municipality in a position to give an efficient service?—Oh, certainly.

765. Take first the capital, have you con-

Mr. *Moulton*—continued.

sidered the question of the capital of the National Telephone Company?—I have been watching it for years; it is one of the financial monstrosities of the age.

766. Do you think that it has an effect on the terms on which the public get its service?—Well, to pay 5 per cent. on their 4,000,000*l.* takes 200,000*l.*, and out of the 4,000,000*l.* of capital, I suppose, a liberal estimate of what is represented by tangible assets would not be more than a million and a half, the rest being represented by watered stock created for the purpose of paying promoters and buying up opposition. It is hardly possible for any company with an inflated capital like that to give a cheap service, and at the same time to pay 5 per cent. to their shareholders.

767. So that where money has been expended in buying up competition you think it took away benefit from the public and made the public pay for it afterwards?—One can come to no other conclusion than that such large sums would never have been paid to promoters of rival companies, but for the purpose of creating a monopoly and victimising the public, because I do not hesitate to say that the public have been victimised by the original promoters of this National Telephone Company.

768. With regard to obtaining capital, you have told us that the Corporation of Glasgow would be in a specially good position for doing it?—We could borrow the money and provide the installation, as I have said, at 2 per cent.

769. Now, with regard to the influence of the public on the Corporation, so as to obtain efficiency of service; in your opinion, is the Corporation in a position in which it must keep up to public requirements?—Undoubtedly.

770. And, therefore, it would be likely to be very quickly responsive to public demands, even apart from any threat of competition?—That is so.

771. Or any actual competition?—That is so.

772. Do you believe that if a Corporation like that of the city of Glasgow were to take up the telephones, there would be any continuance of this inefficient system of single wires?—The system would be established on the twin-wire principle; and I am told by experts that the service of a twin-wire system is absolutely perfect.

773. And if it be true that competition is a disadvantage, can you see any other way of securing a cheap and effective service than by placing it in the hands of somebody that is a servant of the public, and that has no other interest than that of the public to serve?—I think that licences for this purpose should only be given to municipalities, because they are the only bodies who cannot be bought up. I can quite see the impolicy of giving a licence to an individual or to a private company to compete with the National Telephone Company in Glasgow, because it simply means that the Postmaster, by giving that licence, is presenting the individual with a large sum of money which he will get from the National Telephone Company to relinquish his right. No such contingency will happen in the case of a municipality receiving a licence.

774. And the competition between the two companies might be arranged for in such a way that they would get the maximum profit out of the public?—Yes.

775. Would it be possible to take away the benefit of competition if the municipality had the telephone exchange in its own hands, by any such arrangement?—No; if the municipality were to have the licence and establish the system the price of the service would be the price which was required to pay a reasonable return to the Corporation on the money expended, and the competing system would have to bring its price down to the minimum price charged by the Corporation.

776. Now, a question has been asked as to whether the Corporation ought to buy up the National Telephone system in Glasgow. I believe the power of granting other licences is specifically reserved, is it not?—By the agreement it is expressly reserved. With reference to the suggestion that the Corporation might buy up the National Telephone Company if we got the licence, I do not see that there is anything to buy up, because, admittedly, their system of wiring is so defective, that it will have to be superseded by the twin-wire system sooner or later. It may as well be that the Corporation should fit up that twin-wire system as the Telephone Company. As for paying them anything for goodwill of business, the original promoters of the National Telephone Company have already feathered their nest tolerably well.

777. Have you gone into the question of Stockholm?—I have a number of figures here.

778. It has been suggested that Stockholm cannot compare with our English towns because it is much smaller?—That is not so.

779. Is the number of subscribers in Stockholm insignificant?—No; the number is very large compared with either London or Edinburgh, or Glasgow, and the area served by the system at Stockholm is a very much larger area than the area of London; it is an area having a diameter of 87 miles.

780. And subscribers can telephone over all that area?—That is so.

781. Could you give the Committee the number of subscribers?—The population of Stockholm is about 250,000, and the city is telephoned by the State, by the General Company, and by the Bell Company. The State has 2,400 subscribers; the General Company has 8,334 subscribers; and the Bell Company has 800 subscribers, a total of 11,534.

782. How does that compare with the numbers in Glasgow; it is nearly four times as many, is it not?—About that.

783. Do you believe that if the service had been efficient in Glasgow at reasonable rates, Stockholm would have had more subscribers than Glasgow?—Oh, Stockholm would not have been "in it" with Glasgow.

784. There is an example of three telephone companies or systems in the same area; does it at all differ from the case of three neighbouring towns joined by trunk wires?—I should think the cases are almost parallel.

785. So that there could easily be exchanges from one to the other on trunk lines if it was to the

Mr. *Moulton*—continued.

the interest of the various companies that it should be so?—Yes, without any difficulty.

786. I believe the service in Stockholm is on the double wire system?—I understand so, with the Erichsen instruments, which are admitted to be very much superior to any of those in use by the National Telephone Company.

787. Those in use by the National Telephone Company are what they have used from the first; does the subscription in Stockholm admit of profits to these companies?—I believe so. The General Company pays 8 per cent. per annum, and has reserve funds now amounting to more than half of the company's entire capital.

788. Do you know of any reason why we should not have a similar service in Glasgow if the municipality has a licence?—I do not see any barrier.

Mr. *Benn.*

789. You remember the document issued by the convener of your telephone committee?—I heard you refer to it when Bailie Chisholm was being examined.

790. You remember it, do you?—Yes.

791. Do you think it fairly represents the present view of your committee?—I believe it does; it expressed a very strong feeling against what we thought was an attempt on the part of the Postmaster to come to an agreement with the Telephone Company without allowing its terms to be made known in Parliament.

792. Then may I take it that if you saw no prospect of persuading the Postmaster to agree to your application, your strictures on the agreement would be as strong now as in 1893?—Of course our strictures on the agreement would be modified by the fact that the agreement is not quite what we anticipated it would be. When we found that the agreement was not to be laid before Parliament we fancied that it was more favourable to the company than it has turned out to be.

793. Now, with regard to the charges under that agreement, have you considered the increased charges (the trunk wire charges) which would be made for the shorter distances?—No, I have not gone into that.

794. You told us just now that if it were proposed that you should buy up the National Telephone system in Glasgow, in your judgment there would not be much to buy up?—No; what is there to buy up?

795. I take your answer, that there would not be much?—Yes, that is my view.

796. What would be your view, supposing the National Telephone Company proceeded under this agreement, this partnership, with the Post Office; do you think the same condition of things would obtain in 1911?—I fancy that at the expiration of their present licence the Postmaster would take over the thing on what might be called a "break-up" value, but he would not be bound to take over anything. They would certainly have no claim whatever to anything in the shape of goodwill.

797. Do not you think the consequences of the partnership would be that they would then have certain rights for which they would require compensation, and which it would be difficult to disentangle?—I have not gone into the agreement with a view to ascertain whether it amounts to a partnership with the Telephone Company or not, but I should think if there is anything in the agreement which would give the telephone company in 1911 anything in the nature of a substantial claim for goodwill of business, then the agreement ought to be very much modified by Parliament.

Mr. *Benn*—continued.

798. Now, as to the policy mentioned by Bailie Chisholm, the policy indicated in observations made by Mr. Goschen and Sir James Fergusson, with regard to granting to municipalities licenses to work their own system; have you ever regarded those observations as being restricted to municipalities which had not hitherto possessed a system of telephony of any kind?—Certainly not.

799. Until you heard the Postmaster General put that construction upon those observations to-day, did it ever appear to you that there was any limitation to this policy or promise?—It did not occur to me. I do not think the words bear any such limitation. Either a municipality can legitimately get a licence, or it cannot. If a licence can be granted to a municipality in a town where there is no other telephone system, then I do not see why a licence should not be granted to a municipality in a town where there is a telephone system.

800. Then I understand you to say that you would consider it unfair if any municipality were disqualified owing to the unfortunate existence within its area of such a system as that which you suffer from at Glasgow?—I would consider it very unfair.

801. You have studied this question probably from the days of Mr. Fawcett. May I ask you whether you consider the present attitude of the Post Office consistent with the policy which obtained up to the date of your application?—No; I do not think it is. In the days of Mr. Fawcett the principle seemed to be to give licenses to all who applied for them.

802. I will just ask you this question in regard to the Treasury Minute. Did you discover anything in that which would lead you to suppose that free trade in telephone would be limited?—The Minute expressly says the reverse. There are passages in it which clearly indicate that the framers of the Minute had competition in their eye.

Mr. *Tully.*

803. You say you have watched the operations of this Telephone Company for a number of years?—Yes, that is so.

804. You could not tell me what their net profits were for last year, could you?—Yes, I think I could. I have in my hand the balance-sheet for the half-year ending 31st December 1894, and in the net revenue account for the half-year ending 31st December 1894 the balance of net profit carried to the balance-sheet is 122,858*l.* 2*s.* 1*d.* for the half-year.

805. That would be, practically, 240,000*l.* for the year?—Nearly 246,000*l.* per annum.

Sir *Julian Goldsmid.*

806. What is the capital?—With a capital of four millions.

Mr. *Tully.*

807. You have heard it stated here, have you not, that the loss to the telegraph service by reason largely of the operations of the Telephone Company was 240,000*l.* for the year 1894?—Yes, I heard you say so.

808. So it would seem according to these figures that what the public service has lost the company has gained?—If it be the case that the one sum is represented by the other that would appear to be so.

809. And the effect of the tremendous powers granted under this agreement will be, according to your opinion, to increase and aggravate that state of things; that is, the company gaining and the public losing?—I do not think the granting of telephone licenses to municipalities would have such a serious effect upon the Post Office revenues; because, speaking for Glasgow, I do not think that the town telephones affect the telegraphic revenue very much.

810. That is a different question; that is where it is carried on in the Corporation areas; but this service is carried on between different towns like Glasgow and Greenock, where the use of the Telegraph Service has been destroyed, I believe, practically annihilated. Do you think the telephone service within the Corporation area would interfere with the receipts for telegrams and postages by the Post Office within that area?—I think not.

811. You prefer the competition, with the risk of having to put up with two exchanges, rather than endure the monopoly of this company and its working, although it causes great loss to the public service?—Undoubtedly I do.

Mr. *Snape.*

812. You made the remark earlier in your evidence that, if the service were left in the hands of a private company, a maximum charge should be stipulated for?—That is invariably done in all cases of monopolies granted to private adventurers, notably in the case of the electric light. The Board of Trade have a limit beyond which electric light companies cannot make a charge.

813. It is not the habit of the companies, when such stipulations are made, to make a less charge than their maximum allowance, is it?—Sometimes they do.

814. But you do not think that it would remedy the evil even if the maximum charge was reduced below what is at present charged?—It would not remedy the evil if the maximum charge was fixed at such a sum as would enable the National Telephone Company to go on still making their extravagant charges.

815. I gathered from the later part of your evidence that there is no doubt in your own mind as to the desirability of municipalities taking up this instead of private companies; am I right?—I feel very strongly that if the State does not take over the telephone system, the proper parties to manage the telephone system are the municipalities.

816. I do not know whether you have the information; can you tell me how it is that one of the three companies in Stockholm has so much larger a number of subscribers than the other two?—I cannot tell you.

Mr. *Snape*—continued.

817. You do not know?—I do not.

818. Do you know what arrangements exist there so that the subscribers to one of those companies can be put into communication with the subscribers on another?—I understand that the interchange is mutual between the General Company and the Bell Company, and that no charge is made for communication between the subscribers of those two exchanges.

819. Practically they are one company, then?—Well, they are not one company, but they work together, and I anticipate that if Glasgow got a licence for the establishment of a telephone system the National Telephone Company would be quite willing to allow their subscribers to communicate with the subscribers to the Municipal Exchange.

820. Without charge?—Without charge.

821. What about that third company in Stockholm?—That is the Government.

Sir *James Fergusson.*

822. You made a general statement of opinion as to its being preferable that municipalities should have the telephones rather than companies, if the Government does not keep them in their own hands; are you aware that in America, where the telephone is very much developed, it is in the hands of companies?—Yes; but we all know what kind of municipalities they have in America; I have not the least doubt that there is gross corruption somewhere in America, or the telephones there would be much cheaper than they are.

823. Have you sufficient acquaintance with the subject to say that you think the subscription to telephones in America unduly dear?—Well, comparing them with the estimates that I have seen, they are certainly unduly dear; it may be that in America the patents have not run out. I do not know much about the patent law in America, but it may be that there are still patent royalties to be paid of which I know nothing.

Mr. *John Ellis.*

824. Is it your opinion that the telephone service in Glasgow is improving, or that it is becoming worse?—After they introduced that new switch-board which has been spoken of, and which was to do such wonders for us, the telephone system became absolutely unbearable; I wrote them to come and take my telephone away.

825. You are speaking of the present moment?—Yes; but it has been, I should say, improving.

826. Did the memorial or circular from the 2,000 gentlemen you mentioned to some company in Manchester have any effect in improving the service at all?—Well, it caused them to take such steps as led them to say that it would cause an improvement; but the result of their steps was, in the first instance, to make things worse.

827. Which has continued until now?—No; as I have said, matters are not quite so bad as they were. At the time when the Corporation applied for the licence the telephone system in Glasgow was simply unbearable, as I have said.

Sir *Julian Goldsmid.*

828. How long ago is that?—Eighteen months ago.

829. Has

Mr. *John Ellis.*

829. Has your application for a licence had any effect upon the company?—I have not the least doubt of it.

830. In improving it?—In improving it.

831. Then it is improving, is it?—It is improving; still it is capable of very much greater improvement.

832. Is the number of subscribers increasing?—Yes, the number of subscribers is increasing.

833. Is increasing now?—Is increasing now. The lowering of the price had a very considerable effect in increasing the number of the subscribers.

834. I understand you come before us to confirm all that the last witness said with regard to the widespread dissatisfaction which exists in Glasgow, is that so?—Yes. I think I can from my personal experience corroborate what Bailie Chisholm has said.

835. You think that the majority of those who use the telephone agree with you that the service is unsatisfactory?—I think so.

*Chairman.*

836. You were asked a question about the difficulty with regard to the tramways and the overhead electric power for the tramways. That was a matter which was, I think, referred to a Joint Committee of the two Houses under the chairmanship of Lord Cross?—That is so.

837. And clauses were settled by that Committee which are now in operation, and which work satisfactorily?—We got them substituted in our last Act for the protective clause which we were obliged to insert in the Act of 1891.

838. And do you find the new clauses work satisfactorily?—The new clauses work satisfactorily in this sense: that if the Telephone Company does not within two years from the date of our Act provide an insulation for their wires we can go ahead with our electrical system without being subjected to any claim for damage or injury to their system.

839. And whether they introduce a twin-wire system will depend, of course, upon the co-operation of the Corporation of Glasgow?—They have not applied to us for permission to make any change; but I think that with our present information we would be very chary about giving them permission to open up our streets.

840. Or to open up your streets yourselves for them, keeping the control in your own hands?—That is a matter, of course, which has not come before the Corporation, and I would be unwilling to say that I represent the views of the Corporation upon that point; but, personally and individually, I should be averse to giving the Telephone Company facilities for opening up our streets.

841. You are aware, are you not, that the Manchester Corporation have come to terms of that kind with the Telephone Company there?—I am not aware of that.

842. I think you told the Committee that the estimate of the cost of an underground service by the municipality was given you by Mr. Provand, and based upon the figures of the Mutual Company in Manchester?—That is my information.

*Chairman*—continued.

843. Have you ever seen a balance sheet of the Mutual Company, so as to form an opinion as to whether it was a successful company or not?—No, I have not seen a balance sheet.

844. Has one ever been published?—I do not know.

845. You were asked by Mr. Moulton as to whether the necessity for underground wires is not confined practically, if not entirely, to the junction wires between exchanges?—I would not say that the necessity for underground wires is confined to junction wires.

846. Are you aware that a very large proportion of wires to subscribers in provincial towns where they are concentrated in a small area are underground wires from the exchanges to the subscribers, or to the neighbourhood of subscribers?—I would not be surprised to know that that is so.

847. You were asked a question about the effect of competition, and you said you did not view it with apprehension?—Not at all, from the public standpoint; if I was a shareholder of the National Telephone Company probably I would.

848. Viewing it from the public standpoint there must, of course, be a great loss of capital in having two systems radiating from two centres to cover an area like that of the town of Glasgow?—I do not take it that there would be any waste, because if we got the licence now we should establish the twin-wire system, and the National Telephone Company need not do so.

849. Still you would have the two systems in operation side by side covering the same ground?—Yes; but, admittedly, the system in operation by the National Telephone Company is a system which is condemned.

850. Do you think it would be disadvantageous to the telephone subscribers that there should be two systems, and that they should only be able to communicate possibly with the subscribers on their own system?—No; I believe it would be a great advantage, because if the municipality of Glasgow was to get the licences and establish the twin-wire system underground the result of the competition would be to reduce the price, and it would be profitable for the subscribers to connect themselves with both exchanges.

851. I do not quite see that?—Assuming our estimate of the cost to be right, we could give a service for 5*l.*; our reduction of the price to 5*l.* would bring all the subscribers over to the municipal system unless the National Telephone Company chose to reduce their rate to a similar sum; if they reduced their rate to a similar sum so as to keep their subscribers, then, according to present prices, a subscriber could connect himself with both exchanges without increasing the cost, and he would have the advantage of having the twin-wire, a perfect system, as well as the imperfect system of the National Telephone Company.

852. But is it not the case that in Glasgow a large proportion of recent subscribers have entered into a five years' arrangement?—Well, "five years" is not a long period, it would soon run out.

*Chairman*—continued.

853. But during that time they would have to pay the increased amount?—Possibly.

854. Are you aware that in Manchester, where there are the two competing systems, a considerable number of subscribers have to pay the two subscriptions, the national and the new?—I would not be surprised to hear that that is so, although I cannot understand why the National Telephone Company's Exchange in Manchester does not allow an interchange of messages with the exchange of the New Telephone Company, seeing that the National Telephone Company practically controls the other. It seems to me a most inexplicable thing.

855. I am informed that there are 480 subscribers in Manchester who subscribe to the two companies?—I would not be surprised to hear that that is so.

856. You were asked by Mr. Moulton about the apparent inconsistency between the agreement and the Act of 1892; are you aware that the proposal or the provisions in the Agreement were set out in the Treasury Minute of May 1892?—I have the Treasury Minute of 1892 here.

857. Will you look at page 5?—Which section?

858. Section 10?—"As far as practicable, the Post Office will provide underground wires at an agreed rent to connect together the exchanges of a company within one and the same exchange area, so that municipal authorities may not have to complain of their streets being disturbed by the companies, which in some places might be in competition." It would appear as if clause 12 of the Agreement were intended to carry out that stipulation.

859. You say it does appear?—It does appear, yes.

860. And that was a stipulation in the Treasury Minute which was before the Committee of 1892, before the Bill of 1892 was passed through Parliament into an Act?—Yes; but at the same time it does not obviate the difficulty that clause 12 practically gives the company the absolute right to have our streets disturbed; it takes away the veto that we have under the Act of 1892, and confers on the Postmaster General the right to disturb our streets, and, if that be objected to by the municipality, to appeal against our veto.

861. Certainly; but in accordance with paragraph 10 of the Treasury Minute of 1892?—Yes; I have already admitted that clause 12 seems to me to be intended to carry out clause 10 the Treasury Minute.

862. And does, in terms, carry it out?—Well, I should not like to say so without further consideration; it is quite possible that clause 12 may do more than what is stipulated for in clause 10 of the Minute.

863. And the powers which the agreement confers upon the company are also in accordance with paragraph 12 of that Treasury Minute, I think?—That is so.

864. Then, you were asked by Mr. Benn as to whether at the termination of the license in 1911, there might not be some foundation for a claim of compensation. Have you looked at clause 17 of the agreement on page 20, sub-clause 2; perhaps you would just read that?—"Subject

*Chairman*—continued.

and without prejudice to the proviso for determination hereinbefore contained, this indenture shall (save so far as relates to the sale of trunk wires referred to in Article 2) remain in force so long as the indenture of 1884 is in force, and no longer, and upon the determination by any means of the powers and authorities granted by the indenture of 1884, the powers and authorities hereby granted shall absolutely cease and determine, and the provisions of this indenture shall cease to have effect."

865. Does not that answer the question Mr. Benn put to you, and show that in 1911 these powers absolutely cease and determine, and that there would be no foundation for claiming compensation?—I should not like to say offhand that sub-section 2 of clause 17 of the agreement has that effect; but I would say that if it does not have that effect, it ought to be so expressed as to bring about that result.

866. But you do not express the opinion that that sub-section 2 does not have that effect?—I have only heard the point raised to-day, and I have not given it consideration; but I should certainly think that in the year 1911 the country should not be called upon to pay anything in the shape of goodwill to the National Telephone Company on the expiry of the license.

867. And so far as you are aware there is nothing in this agreement which would call upon the Government to pay compensation?—It did not occur to me that there was anything.

868. I understand that your general opinion is that the State should have the telephone?—I am very strongly of that opinion personally.

869. And if the State is not prepared at the present time to take it, that the municipality should have the right to it?—That is so.

870. Do not you think that the granting of municipal licenses would tend to put great difficulties in the way of the State acquiring the telephones?—No, not at all; it would greatly facilitate the State acquiring them, because in the first instance it would bring down the price of the telephone service; and if it were thought expedient to buy up the National Telephone Company at any time during the 16 years that remain of the license the purchase would be effected on much more reasonable terms than it could be if they were bought up on their presently inflated profit.

871. Although at that time the State would, under the circumstances you suggest, have to take over two competing systems side by side in the same area?—I believe myself that the existence of two systems in Glasgow would not be in the long run a source of expense, because it is quite possible that the demand for the telephone in Glasgow would be so great that a double system of wiring would be almost necessary even though there were no two licensees. I think Sir James Fergusson said a little while ago that one source of the cost in America was the great number of subscribers on one exchange, showing that it might be an advantage to have two exchanges.

872. I think Sir James Fergusson was referring to the very large number of subscribers upon the exchange of one system?—Yes, which caused an increased expense.

873. That

*Chairman*—continued.

873. That difficulty might be overcome by having further exchanges, you think?—Two exchanges could communicate the one with the other.

874. Extending your exchanges on the same system?—My opinion is decidedly that the granting of licences to municipalities would have a contrary effect to what you, sir, seem to imagine.

875. Sir Julian Goldsmid wishes me to ask you this question: You have said that, supposing the Post Office decided to buy up the National Telephone Company, the existence of municipal telephones would facilitate that operation. I confess that that has not conveyed much to my mind; perhaps you will explain a little more fully. Suppose the State determined to take into its own hands the whole telephone system, in what way would that operation be facilitated by the fact that, instead of having to deal with one licensee, the National Telephone Company, it would have to deal with the National Telephone Company and the municipality in each of these areas?—I have already said that I consider the cost would be so reduced, and the number of subscribers would be so largely increased, that there would be room for two exchanges in the City of Glasgow.

876. Do I understand you to mean that the cost being reduced you think the effect of the municipal telephones would be to reduce the value of the property of the National Telephone Company?—No, I do not believe it would have the effect of seriously reducing its actual worth; it would have the effect of seriously reducing the nominal value.

Mr. *Moulton.*

877. You believe that the revenues of the new, or the National Telephone Company, now are what I might call monopolist revenues?—Certainly.

878. And that the rental they charge is more than the value of the service measured by the cost it is to them?—By a long way.

879. And that, if there were two telephone agencies, the effect of competition would be to reduce the rentals to their fair amount?—I have been most unhappy in my expressions if I have not conveyed that meaning to the Committee, because that is what I have been saying all along.

880. And you think that the most effective competition for this purpose would be that which would be introduced by the municipality?—Undoubtedly. Taking it as a general rule, if you have to buy up two people instead of one you will have probably to pay more, but in this particular case, if the National Telephone Company is to be bought up at any time during the next 16 years, while the licence is running, and there is no competition, you will have to buy them up and to pay compensation in view of the enormous profit that they are making at the monopoly rates.

Mr. *Moulton*—continued.

881. Do you believe that the reduction of profit would more than compensate for the fact of your having to deal with two wires?—Much more.

Sir *Julian Goldsmid.*

882. I want to know how the granting of municipal licenses would facilitate the making of arrangements which you can now make with one company, when you would have to make them probably not only with the one company, but with a great variety of municipalities?—I do not know that I can make my meaning any plainer.

Mr. *Moulton.*

883. Do you think the Corporation of Glasgow would object to terms being inserted in the licence by which the Post Office would, in case it was buying up the telephones, take the Corporation system at a fair price?—I should think not.

Mr. *Tully.*

884. Do not you say that the Corporation would be willing not to charge for goodwill?—It would be most unreasonable of the Corporation or any corporation to expect to be paid for goodwill.

885. And the Telephone Company would charge for goodwill?—If you buy them up before the licence runs out they will make you pay the full market value of their licence.

886. Would not that make a very substantial difference in the price?—I should think so.

Mr. *Snape.*

887. You have said that if the Government had to buy at any time from the municipality, supposing they had the licence, they could buy on reasonable terms: what do you mean by "reasonable terms"?—The fair value of the installation at the moment of transfer.

888. By "fair value" do you mean the outlay of the Corporation, or some addition to it for some vested interest?—There might be the vested interests of a few employees to consider, but I should not think they would be of any great consequence.

889. Of what class; what sort of vested interests?—If you took over the whole staff that was working the telephone system there might be no vested interest to compensate.

Mr. *Benn.*

890. On that point I want to be quite clear. The point is this: Supposing two systems obtained in Glasgow (one worked by the Corporation and another by the Company) in the year 1911; supposing the municipal system were the better of the two, would not the Post Office have the advantage of having the pick of two systems; that is to say, if they preferred to acquire the municipal system, the better of the two, they would be able to do so without any regard to the system of the National Telephone Company, would they not?—That is undoubtedly the case.

891. Would not that be a great advantage to the Post Office?—A very great advantage.

Sir JAMES ALEXANDER RUSSELL, LL.D., called in; and Examined.

Sir *Charles Cameron.*

892. You have been a member of the Town Council of Edinburgh for a very long time, have you not?—Yes; about 15 years.

893. And you have occupied the office of Lord Provost of that town?—Yes, I have.

894. Previous to your Lord Provostship you were one of the magistrates?—Yes.

895. The Town Council of Edinburgh is, like that of Glasgow, a considerable telephone user, though not nearly so large?—Not nearly so large; still they do use it.

896. Just mention the extent to which they use it?—We have paid the Telephone Company, first and last, a little over 2,000*l.* for the Corporation telephones.

897. And that is extending over a long time?—Yes; we have been using them for 13 years; on a small scale at first, and gradually rising. In that I do not comprise some part of the town's work; only the watching, fire engines, and public health.

898. You do not comprise those?—I do not comprise the water and gas, but only the watching, fire engines, and public health. These are the figures I have in my hands.

899. So that if you were to take in these other departments, it would add to that amount that you have mentioned?—It would add something to it.

900. Will you please inform the Committee what the telephone charges in Edinburgh are?—We used to pay 15*l.* a year; but for the last two or three years we have had a reduction in the price to 10*l.* for an instrument within half-a-mile radius of an Exchange, and 2*l.* 10*s.* for every additional half mile.

901. How many subscribers are there in Edinburgh?—There are about a 1,000 in the city of Edinburgh proper, and 1,420 in Edinburgh and Leith. You must always treat Edinburgh and Leith as one town for all these services.

902. What is the population?—The joint population is about 340,000.

903. You have heard what the Glasgow Corporation witnesses have said as to the unsatisfactory nature of the service in Glasgow; will you please give us your experience as to the service in Edinburgh?—I do not think the service in Edinburgh is so unsatisfactory as it is in Glasgow; but on the other hand, I must say that I have never spoken to a telephone user in Edinburgh who is completely satisfied with the service; they complain not merely of the delays at the Exchange, but especially of indistinct speaking, and of hearing other persons than those with whom they wish to speak.

904. You mention in your *précis* here an interesting fact, a fact which may interest the Committee, though it has not very much practical bearing upon our inquiry, that is, that Professor Graham Bell, the inventor of the telephone, is a native of Edinburgh?—Yes, he is a native of Edinburgh, and only left the town a very few years before the telephone was brought out in America.

Sir *Charles Cameron*—continued.

905. So you think that Edinburgh naturally should have a first-class telephone service on that ground alone?—We ought to have an interest in the telephone.

906. You say that the number of subscribers in the town of Edinburgh is only about 1,000?—Only about 1,000.

907. And you believe that a very much larger number would be subscribers if an efficient twin service at moderate rates were provided?—I have no doubt of that at all; it is an absurdly small number for a town of the size of Edinburgh, inhabited by such a wealthy class of citizens.

908. There is a special reason that exists in Edinburgh, is there not, more almost than in any other town of the kingdom, against overhead wires?—Yes.

909. Edinburgh is a very beautiful town, is it not?—Amenity is a very important feature of the town, and we have a great objection to overhead wires in consequence.

910. The Telephone Company does not appear to treat you, in Edinburgh, as badly in the matter of wayleaves as they treat Glasgow, or you may be tutoring them; they pay you, do not they?—They pay nothing for going across streets, but the Corporation does get money from them for leave to attach their posts and wires to various buildings throughout the town, which happen to belong to the Corporation; and I know they pay considerable sums to private people; in fact, I am a director of a company which is just now considering how large a sum it should charge them for having 110 wires attached to a building.

911. Did not they oppose one of your Improvement Bills in Parliament?—They did.

912. Because you proposed to pull down some building on which they had their wires?—We have had many controversies and conflicts with them in Parliament. I can give you an account of all those. In one case they were the only opponent of one of our Bills, the Improvement Bill of 1893, and they caused it to be an opposed instead of an unopposed Bill; you can understand the expense of that.

*Chairman.*

913. What was the ground of their opposition?—It was a Bill for the improvement of the town by widening streets, and one of the points on which they opposed was a claim for compensation for the removal of their wires from one of the old houses we wished to throw down. We had bought the house from the owner. They had originally attached the wires to the house without his knowledge or leave. When he found it out he made them pay smartly for having the wires attached; and they were left there during his pleasure and subject to a month's agreement or a month's notice; yet they opposed us in Parliament and tried to get a compensation clause.

Sir *Julian Goldsmid.*

914. What was the result?—They were beaten in

Sir *Julian Goldsmid*—continued.

in Committee. They wished to compromise it, but we would not compromise; we thought it a case of principle.

Mr. *Tully.*

915. Who paid the costs?—We had to pay our own costs.

916. You did not get costs against them?—I do not know that we asked for them.

Sir *Julian Goldsmid.*

917. Why did not you get your costs?—I am not sure that we asked for them. I am told that we never did ask for the costs.

Sir *Charles Cameron.*

918. That is not a solitary instance in which the action of the Telephone Company in Edinburgh has landed you in difficulty and expense, is it?—I have just spoken of their opposition to our Improvement Bill. In the same year we had a Tramway Bill in Parliament. The Corporation owns its own tramways. We wished to take power to use mechanical or electrical power on the tramway. They objected to the word "electric" in our clause, and we felt their opposition so serious that we were obliged to drop the power out of the clause altogether rather than take the protective clauses which they had secured against some other tramway owners. We would not accept these clauses, and so we dropped out the power to use electricity altogether. This Bill, of course, was promoted before the recent report of the Joint Committee appeared.

919. But the practical result of that has been, has it not, that in leasing your lines to the company that works them you have been debarred from making use of electricity for tramway purposes during the currency of your lease?—That is so. We have a Water Bill in Parliament this very session, and they have been corresponding with our Parliamentary agent trying to get up opposition in respect of clauses.

920. That is rather an audacious case of opposition, is it not, in your opinion?—Their whole Parliamentary intercourse with us has been of the most audacious description.

921. Will you please read us what they say with regard to this last Water Bill?—This is part of the correspondence: "We are instructed by our clients, the National Telephone Company, to ask for the addition of the words to Clause 37 of the Bill, which you will find noted on the accompanying copy. An answer in the course of the next few days will oblige.—Yours, &c. (signed) *Martin* and *Leslie.*" Then our agents (Messrs. Beveridge) replied: "We duly received your letter of the 12th, requesting an addition to be made to Clause 37 at the instance of the National Telephone Company. Our clients cannot admit any right of the Telephone Company to require any amendment to be made on the Bill, nor any *locus* to be heard against it. We are sorry, therefore, that we cannot comply with your request."

922. That is only one of many cases?—That is only one of many cases; there are others beside this. It is right that I should say we

Sir *Charles Cameron*—continued.

have opposed them. We were amongst those who opposed in 1892 the National Telephone Company and the New Telephone Company, when they deposited Private Bills in Parliament to obtain powers over roads and streets of towns. The Corporations generally petitioned against that. We thought they were trying to infringe our rights over our streets, and we expect that if they are kept in their present position by the postal authorities they will probably lodge a Bill very soon again, and that we shall once more have to come to Parliament to protect our rights.

923. There is a good deal of evidence in our *précis* that you are prepared to give, but have you some very strong objections in Edinburgh to allow your streets to be interfered with?—Extremely strong objections; I have just found a list of further fights in Parliament: In the case of our Electrical Lighting Order in 1891, we were put under an obligation, much to our disgust, to protect the Telephone Company. This order was obtained in 1891 before the protective clauses of the Joint Committee came out. They only came out in 1893; but here we are at this moment in our order crippled by clauses of this sort. We have not yet come into practical collision with them, because the current is only to be turned on on the 11th April.

924. You have told us that in Edinburgh there is the same objection to interfere with your powers over your streets as exists in Glasgow, and I suppose you would, on that point, corroborate what has been said by the Glasgow witnesses?—I corroborate what has been said by the Glasgow witnesses.

925. I understand that quite recently the Lord Provost's Committee of the Edinburgh Town Council, consisting of all the magistrates, and the chairmen of the different committees, have resolved to recommend the council to apply for a licence to set up a Municipal Exchange in competition with that of the National Telephone Company?—Yes, that is so.

926. I suppose there is no question but that that application will be made?—Yes, I have no doubt of it.

927. And that it would be made if this Committee were to report in favour of the Glasgow application?—Yes, it depends on the result of the Glasgow application. We kept it back until we saw what our Glasgow friends succeeded in doing.

928. You corroborate, I suppose, also, as applicable to Edinburgh, the statements made by Bailie Chisholm, particularly as to the ability of the Corporation to supply a much better service than that at present existing, and much cheaper?—That is our belief.

929. You do not ask for any monopoly?—No, we do not require any monopoly.

930. You would be quite willing to meet the National Company?—Yes; we should make no profit. The Corporation carries on works for the citizens, not with a view to making any profit; in the case of the water and gas, we are not allowed to make a profit; in fact, we spend the money in improving the service and making it cheaper. We must supply at cost price.

Sir *Charles Cameron*—continued.

931. You hold, in fact, that the licence should be obtained—that the monopoly, in fact, should be held either by the nation or by the municipality?—Yes, that is my view.

932. Do you agree with what Mr. Colquhoun said as to an arrangement for the transfer of the undertakings to the Government being likely to be effected more easily, and on cheaper terms, if the municipalities are granted licenses?—My personal feeling is rather in favour of the municipalities working the telephones within the local areas than the Government working them; but the next best to that I think would be the Government. I have the greatest objection to any private company doing it. I think there would be no difficulty at all, should the Government wish to take over the telephones, in taking them over from the municipalities; as they would not be held by them on a profit-making basis, they would have no reason to ask for any payment for them excepting to cover the cost and provide for the servants who would be transferred; and, besides that, municipalities are loyal to the State and would wish to support a State department.

933. You think that by far the most important use of the telephone is in areas?—I do, and especially with reference to my own town.

934. You find that in Edinburgh most people prefer telegraphing rather than telephoning long distances?—Yes, many people in Edinburgh to whom I have spoken have told me that they would surrender the right to telephone to other places if by so doing they could only get a really efficient service inside their own town; they would pay the sixpence or shilling for a telegram.

935. You heard, did you not, what Bailie Colquhoun said about facilities between Glasgow and Edinburgh in case they should both work telephone exchanges. I suppose in Edinburgh the readiness to exchange without terminal charges would be equally applicable?—That goes without saying. The corporations help each other constantly in every possible way just now.

936. You see no difficulty in interchange between the National and the municipal service in case of its being started in Edinburgh?—I am not aware of the technical details of carrying out such an exchange, but so far as the willingness of the Corporation to accept messages goes, I am quite sure they would accept messages from anyone. They must run the telephones in the interests of the citizens and only for the good of the citizens. They have no other aim before them, and, therefore, it would be their interest and their duty to accept messages for their fellow citizens, whoever sent them.

937. I suppose that Parliamentary fight that was forced on you by the Telephone Company where they made an opposed Bill out of an unopposed, cost a very considerable sum of money?—Yes, we had to bring witnesses here from Edinburgh, besides going through the opposition.

938. I suppose you had to pay counsel, too?—Yes.

939. You think that if licenses were being granted to municipalities Edinburgh would be quite prepared to go into the business?—I think so.

Sir *Charles Cameron*—continued.

940. With the approval of its citizens?—Yes.

Mr. *Tully.*

941. Leith, I believe, is the seaport of Edinburgh?—Yes.

942. And I suppose, before the telephones came into use, there was a large telegraphic communication between Leith and Edinburgh?—Yes.

943. That has been annihilated by the existence of the telephones?—No doubt it has.

944. And that is how it affects the general revenue of the country. This monopoly affects you in Edinburgh specially by harassing and expensive litigation?—Yes. As regards the falling-off in the telegraph revenue, I do not see that it can matter to the Government whether they get a sovereign from the telephone licence, or from some other portion of the postal service; it is all the same.

945. Royalties?—Royalties. I do not wish to be exempted from taxation, nor does my city. We are quite willing to contribute our fair share to taxation.

946. That is a different question?—I beg your pardon; I thought it was the same question.

947. No; I am asking you as to the revenue derived from telegraphing which has been largely done away with by telephones, from which the postal revenue will get a certain royalty; but that does not make up the amount that is lost in consequence of the telephone service; what do they charge you for the use of the telephone?—£10 within the first half-mile; then 2*l.* 10*s.* for every half-mile beyond from the exchange.

948. Is that a higher price than at Glasgow?—Possibly it may be the same.

*Chairman.*

949. I think you are under the impression that the two sources of revenue are distinct?—Yes.

950. The telegraph revenue and the falling-off in it takes into account the royalties?—I was not aware of that. It shows that the royalty is not large enough, possibly.

Sir *Charles Cameron.*

951. You think you could give a very much cheaper telephone service, and yet pay the Postmaster a much bigger licence than the National Telephone Company at present does?—Well, we have been advised that we can do it for about 5*l.*, and I think there is great room between 5*l.* and 10*l.* even to give something to the Postmaster General.

Mr. *Moulton.*

952. I understand you agree with the last witness that the telephone is a social convenience which is rapidly becoming a social necessity?—Quite; I do.

953. And you are of opinion also that the public ought to have a cheap and effective service for that purpose?—Decidedly.

954. You think that it is chiefly valuable in local areas?—I think so; yes.

955. In

Mr. *Moulton*— continued.

955. In fact, that it is a local need, and that the long-distance telephone is of very minor importance?—Yes, that is my view. It may be partly affected by the peculiar position of Edinburgh.

956. So that that points to its being in the hands of the municipality?—I think it does.

957. Do you think that there would be the least difficulty in arranging in such a case with the outside districts so that they should come in too; I mean the districts that lie close around it; do you think there would be any difficulty in arranging with them?—The municipality would most heartily enter into any arrangement; there would be no obstacle on their side.

958. Of course, you have heard of the agreement with the existing telephone companies, and we are agreed that there is no provision for either a cheap or an efficient service in that except so far as there is the power of granting new licenses?—That is all I can see in it.

959. Is there any competition which, in your belief, would be more effective in securing a cheap and efficient service than that of a municipality?—I think not. It is quite fair to say that my own private view is that competition would not last long within the municipal area. A municipality which is not going to make any profit must, I think, inevitably exterminate any competitor.

960. But, at all events, it would either exterminate it or reduce it to such terms as would make it also reasonable and efficient?—That is so.

961. In your opinion would it be possible for a dear, inefficient service to live side by side with a municipal cheap and efficient one?—Quite impossible; people would change from the one to the other.

962. Therefore, whatever may be the advantages or disadvantages of competition, if it is to be the means of securing a good service it could not be applied better, in your opinion, than by giving it to a municipality?—No, I think not.

Sir *Julian Goldsmid.*

963. Competition, in fact, will result in municipal monopoly?—I think that will be a still greater benefit to the public.

Mr. *Tully.*

964. You would not do that by making it a legal monopoly, would you?—We would make the monopoly by our good and cheap service; we do not want any legal monopoly whatever.

965. You would not ask us to knock down the monopoly of the New Telephone Company in order to set up the other monopoly?—Not in the least. We only ask for the monopoly so far as we create it for ourselves by good work.

*Chairman.*

966. I understand you are primarily in favour of municipal telephones as against the State taking them over?—I think it would probably be found to work better. There would be considerable difficulties in the State breaking up streets, or even going over the roofs of houses, on such a large scale as a good telephone service would mean. I do not see why Edinburgh should not be like Geneva and other cities, where almost everyone has his telephone.

967. Have you ever found any difficulty with the Post Office in connection with underground way-leaves?—We are very loyal to all Departments of the State, and have never required the Post Office to exercise its power of appeal; we have always gladly given them everything they have asked, but as yet the Post Office have asked for very little from us. It has only asked leave to put down a few telegraph wires instead of putting down telephone wires by the thousand.

968. I hope you have found them anxious to meet the wishes of the municipality?—There has never been the smallest dispute with them. The town council have been most anxious to meet the Post Office.

969. You have mentioned the controversies and contests you have had with the Telephone Company with regard to electrical matters; do you think the granting of a municipal license would put a stop to these contests with the company?—I think it would have that effect in a short time.

970. I will come to that in a minute; you mean by destroying the company in the area of the city of Edinburgh?—That would be the effect in the end; in the meantime I do not know that they would be so anxious to defend the 5*l.* rate as they are now to defend the 10*l.* rate.

971. But those controversies took place before the Report of the Joint Committee, I understand you to say?—The last one took place only this Session, the Session of 1894-95. I mean the attempt to attack our Water Bill.

972. But with regard to the electrical currents, what do you say?—With regard to the electrical currents, our Tramway Act was in 1893, and our Improvement Act was in 1893, and our Electric Lighting Order was in 1891.

973. That was before the date of the Joint Committee?—Yes, that was before the date of the Joint Committee.

Sir *Charles Cameron.*

974. The effect of the tramway contest remains to this day, does it not?—Yes, it does.

*Chairman.*

975. In consequence of a lease you have given?—No, not in consequence of the lease. We were obliged to alter the powers we sought in our Bill, and then we gave the lease upon the Bill which we passed into an Act.

Sir *Julian Goldsmid.*

976. A lease of what?—Twenty-one years.

*Chairman.*

977. I understand the council has not had this matter before them, and have come to no decision, therefore, upon it?—It has not come to any final decision; it was brought up by motion and mentioned to the council more than a year ago. At that time the Glasgow corporation applied for a license, and we said that as they had got up the information and were prepared to go

*Chairman*—continued.

on there was no use in our incurring the expense and trouble until we saw the result of their application. I may say that the Glasgow corporation has always given us their reports; they have given us information and all the help they could in any matter, and we have done the same by them.

978. You have mentioned that the corporation of Edinburgh have taken over the gas and water?—Yes.

979. Do not you draw a distinction between gas and water, which are necessary to every inhabitant, and telephones which, after all, must be restricted to a particular number of the inhabitants?—There are some people who do not use gas, not very many; but what I feel about it is this, that, as a general principle, wherever a monopoly affecting the whole of the streets is introduced, that ought to be in the hands of the public authority, and not in the hands of a private company. The Telephone Company must use the streets and either go overhead or underground.

980. Or come to the corporation and ask them to do the work for them, under their own control?—If the corporation put down the cables underground it would be possible for them to charge rent to the Telephone Company; but introducing different people, I am afraid would introduce friction between the officials.

981. You are aware of the agreement between the corporation and the company at Manchester?—Yes; I do not know how it works.

982. You have said that Leith and Edinburgh are, for telephonic purposes, one city; but they are two corporations, are they not?—They are two corporations. I do not think the people can tell where one begins and the other ends; when I am in the streets I have difficulty in doing so myself.

983. Now would you propose that the municipal license should be limited as regards Leith and the adjoining districts?—Just as we share the water with Leith and Portobello and the gas with Leith; the water and the gas are "joint" to the corporations.

984. You would suggest that it should be limited to the area of the two municipal boundaries?—Yes; the two municipal corporations.

985. How would you get over the impossibility of subscribers in the city communicating with their houses outside the city, which is a very common use of the telephone?—Well, with us, that does not exist to a large extent. There are some, I admit. We would be quite willing to take their messages in if they have the power to have telephones in their own houses.

986. Perhaps Edinburgh is not like other towns, where a large number of inhabitants live outside the town, and carry on business within it?—No. If we had them, the question might arise; but I have not the smallest doubt that the corporation would be willing to take in messages.

987. They would have to pass through two exchanges instead of one?—There would be no exchanges outside, these would be single houses. Anyone living in the country round about Edinburgh would have to send into the Edinburgh Exchange single wires.

*Chairman*—continued.

988. You do not suggest that the Edinburgh corporation should ask for rights extending over roads beyond the limit of their boundary?—No; but if they had a wire there we would join it to ours.

989. An individual subscriber would have to bring his wire in?—Yes.

990. You are aware, of course, that the restricted area that is given to the National Telephone Company, in the case of Edinburgh, is an extended area, including Edinburgh, Leith, Portobello, Musselburgh and the police burghs of Dalkeith, Lasswade and Loanhead?—Yes; these are all practically within a raidus of five miles.

991. Still it is a more extended area than the restricted area which you would suggest for telephonic purposes?—Yes. When I suggest the area I am giving my own opinion rather than that of the corporation. We are joined, in the case of water, to Portobello, and it might be convenient to take that burgh in in the case of the telephone.

992. You would not admit that if you obtained the license from the Post Office you would give to the National Telephone Company way-leave powers corresponding to what you would be able to exercise yourselves?—No; we are quite willing, I think, to accept their messages so far as that is convenient to our citizens, but not to give them way-leave powers.

993. Therefore you would have an advantage over them in that respect?—Yes, a decided advantage.

994. And probably the advantage of putting down the twin wire system underground?—I may mention a small matter just now that will show how we can take advantages of circumstances. We are presently going to cable our corporation tramways, that means a good many miles of cabling. Now when the streets are opened, I am told it would be easy to arrange for carrying telephone cables alongside in the cable tramways apparatus, in the ground.

995. You could do it for the National Telephone Company as well as for yourselves, could you not?—Yes.

Sir *Julian Goldsmid.*

996. Or for the Post Office?—We should do it for the Post Office at once; but I do not think we would do it for the National Telephone Company under any circumstances if we could avoid it.

997. Not if they paid you handsomely?—No.

*Chairman.*

998. But your opinion is that within a short period the effect of a municipal license would be to destroy the National Telephone Company within that area?—That is my own personal opinion. I do not see how a company that has to earn dividends can compete with a municipality that is not going to earn dividends, but which is going to supply the convenience at cost price.

999. And you do not think that that would be in any case a hardship that a company which was formed under Parliamentary powers, or rather under powers conferred by Parliament upon

*Chairman*—continued.

upon the Postmaster General, should be destroyed and driven out of the various areas where productive work can be carried on by municipal telephones?—It would be a hardship if they had not had sufficient time to pay themselves for their initial enterprise. Notwithstanding the great outlay frequently involved, a patent is only allowed to run 14 years, and very often it is much more difficult and expensive for a patentee to get anything out of his patent than for a telephone company to get anything out of its telephones.

Sir *Julian Goldsmid.*

1000. How long has the National Telephone Company been there?—About 13 years. They bought up the Scottish Telephone Company in 1881.

*Chairman.*

1001. That is about 14 years?—Yes.

Mr. *Tully.*

1002. What would be your objection from the municipal point of view to the Government taking over the telephone service?—I am only expressing my own private opinion; I do not express the opinion of the Corporation on that matter. I think it would be better worked by the municipality than by the Government; the municipality should be taken rather as an agent of the Government.

Sir *Julian Goldsmid.*

1003. You have no faith in Government management?—I think the Corporation management is, on the whole, better; there is a certain unwieldiness about big concerns.

Bailie Kinloch Anderson called in; and Examined.

Sir *Charles Cameron.*

1004. You are, I believe, one of the Magistrates of the City of Edinburgh, and have been a member of the Corporation for many years?—That is so.

1005. You have heard what Sir James Russell has said, and you corroborate him?—I quite concur in his statement.

1006. You have, however, some facts to add to show the importance which the Corporation of Edinburgh attach to the control of the streets?—They are exceedingly anxious to do all they can to maintain in their own hands the control of the streets. Prior to 1869 there were three companies which had a right to open the streets—the water company, and two gas companies. The exercise of the powers by these companies was found exceedingly inconvenient, and complaints were frequently made on the part of the public as to the annoyance caused by their opening the streets so frequently, and repairing them very often badly; so that in 1869 the Corporation and the two neighbouring Corporations of Leith and Portobello bought out the water company at a large price—the price of 24,840*l.* of perpetual annuities. In like manner in 1888 the Corporation in conjunction with Leith bought out the two gas companies at a price of 34,000*l.* of redeemable annuities, meaning a capital value of a million. That was done very much with the view of having the control of the streets in the hands of the Corporation. In the same way, in order to prevent a new company coming into the city, with powers over the streets, the Corporation themselves promoted an electric lighting order (they now have that order); and in 1892 the Corporation acquired by purchase the tramway system at a very large price, all with a view to keeping the control of the streets.

1007. And I think Sir James Russell was asked whether there was not a great difference between water, which was necessary for every one, and telephonic communication, which might be considered the luxury of the few; but is it not a fact that electric lighting is a luxury?—Quite as much as telephones, at any rate; more so, I should say.

Sir *Charles Cameron*—continued.

1008. Generally you corroborate everything that Sir James Russell has said?—Yes.

1009. You think that the City of Edinburgh, if it got a licence, would be quite willing to accept it for a period terminable with the licence of the National Telephone Company, and to give up their undertaking to the State on absolutely equitable terms, and without any view to extracting profit?—I do. The Lord Provost's Committee unanimously made the recommendation that they should apply for a licence.

*Chairman.*

1010. Do you concur with the last witness that competition would destroy the National Telephone Company in Edinburgh?—Well, I quite believe that it would have the effect of reducing the price to the price at which the Corporation would be able to supply the service, but if they came into competition by improving the service, I do not see why it should destroy them altogether. The two companies might exist, and exchange messages even; there might be some such arrangement as that.

1011. So you view with equanimity the two competing services side by side in the same area?—Yes; I think they might both do well; both form connections of their own, and that it would be to public advantage if there was an arrangement whereby they could transmit messages from one to another.

1012. Assuming that they did not come to an arrangement like that, what would happen?—Then, if the price was reduced, as has already been said, to 5*l.*, the public could join both and have the advantage of both services for the 10*l.* that they pay at present. That is assuming the National Telephone Company reduced their rate to that at which the Corporation believe they would be able to supply the Telephone Service; and then the public would get the advantage of two services.

*Chairman*—continued.

1013. Do not you think the fact that the corporation would be restricted within the area of the municipal limits would be a serious handicap to them as against the company with the larger area which has been given them?—I should say that it would not be quite so convenient, but we might apply for an Order to have the area made co-extensive with that of the company. They have the area including Portobello, Musselburgh, Dalkeith, and these places that you mentioned a few minutes ago, and I think the corporation might apply for that area just to work it as the company do at the present time.

1014. Is there any instance of a corporation carrying on a business of that kind outside the area of its burgh?—I do not know that there is any instance of a corporation carrying on a telephoning business at all. At the present time we are associated in the water undertaking with Portobello and the district, these several places which you have named; we supply the water by arrangement there; the "Edinburgh and District Water Trust" it is termed. We supply all these places with water.

Sir *Charles Cameron.*

1015. Are you aware that Glasgow supplies a number of surrounding places with water?—Yes.

1016. And gas?—And gas. We supply gas widely as well.

Mr. George Bisset, called in; and Examined.

Sir *Charles Cameron.*

1017. You are the City Treasurer of Aberdeen, are you not?—I am.

1018. And you are chairman of the finance committee of the town council of that town?—Yes.

1019. Your finance committee have charge of all the financial arrangements of the City of Aberdeen?—Yes.

1020. Will you please tell the Committee how much the telephone subscriptions of the City of Aberdeen or of the municipality of Aberdeen amount to?—£200.

1021. Besides that you are a director of a large trading company and have a large number of instruments on hire from the telephone company?—Yes.

1022. In that capacity you pay how much?—£120.

1023. What is your experience of the service in Aberdeen?—My experience of the service in Aberdeen is that it is very bad indeed.

1024. It is cheaper than it is elsewhere, is it not?—It is cheaper than in Edinburgh and Glasgow.

1025. What is the price?—£8 10*s.* within a certain radius, and if you get a connection beyond that radius it is by agreement.

1026. How many subscribers have they, and what is the population?—There is one subscriber to every 125; but in this connection I may say that in 1892 negotiations were entered into with another telephone company (the New Telephone Company, I think it was) who offered to come to Aberdeen, providing that a sufficient number of subscribers could be obtained. A large number of people signed an agreement or entered into negotiations, with the result that the charge was reduced to 8*l.* 10*s.* At that time the number of subscribers was one in every 165, and the reduction in the rate has effected an increase until we have one subscriber in each 125, a larger number, so far as I can gather, than there is in any other town in the United Kingdom.

1027. I do not know whether you heard Bailie Chisholm tell us that concurrently with the diminution in the telephone charges in Glasgow from 20*l.* to 10*l.* the number of subscribers had multiplied threefold. You tell us that in the case of Aberdeen a large increase has been effected by the reduction of price?—Certainly.

Sir *Charles Cameron*—continued.

1028. Do you happen, personally, to be aware that where the reserve procedure has taken place, where the price has been raised as in the case of Dundee, there has been an absolute stoppage put to it?—Yes, I believe that is so.

1029. But you are not going to speak to that?—No.

1030. You are entirely in favour of competition, are you not?—No. Anticipating this question from what I saw in the evidence asked of some witness here, I had a meeting with my committee who have charge of this matter before coming here, so that I might be able to speak with some authority on that question. We feel in this position, that the National Telephone Company has no right whatever in the City of Aberdeen. They got admittance to the city by an application, which I have set out in my evidence. That was granted on the distinct condition that they were going to remove the whole of their wires on getting one month's notice from the town council to that effect.

1031. Every wire they put up they have to remove, have not they, if requested so to do?—Yes. I have here a copy of the application which accompanies every request to extend the wire (they have to send that in signed), which stipulates that they shall remove that wire when asked at the request of the borough surveyor; that has to be done in the case of every single wire that they put up.

1032. So that you have actually the power under the agreement to send them out bag and baggage right off?—We hold that we have that power. At one month's notice, under this agreement, they are bound to take down every wire in the City of Aberdeen, and remove it.

1033. You have got, I think, some powers more extensive over your streets, both overhead and below ground, than they have in other towns in Scotland, have you not?—It is a fact that in no single instance is the municipal administration of Aberdeen carried on under any general Act, but under Acts which we have obtained from time

Sir *Charles Cameron*—continued.

time to time in Parliament, and the powers in that respect as well as in public health matters are much stronger than in anything I know of, or as compared with any public Act, so far as I am aware.

1034. The Aberdonians generally are, in fact, able to look after their own interest?—They claim to be able to do that.

1035. Having got the Telephone Company so well under your thumb, do you make them pay wayleaves?—No, we have made no charge for wayleaves; but coming back to the question (I beg your pardon, I have led you away from the question you put to me), I was saying that anticipating that this question was going to be asked me, I had a meeting with my committee, who have charge of this matter, and they stated that they did not see their way to enter into any working arrangement with the National Telephone Company, but that they did not want to be unreasonable, and if a license were granted they would be perfectly willing to take over the business of the National Telephone Company (although we do not admit that they have any claim for it) on something like the same conditions as those upon which the Government have taken over the trunk wires; and beyond that we would be willing to enter into negotiations with regard to what might be paid for the goodwill of the business, that is to say, give them the value for their plant as it exists in Aberdeen, whatever it is, after being ascertained by an independent authority and 10 per cent. in addition. Those are the terms, I was told, we should be willing to agree to rather than have the difficulties of a competing system or give the National Telephone Company any authority whatever over our streets.

1036. That shows what a drawback Aberdeen thinks it would be to give the company any pull or any authority over the streets?—We feel that in connection with our own departments. We find we have the greatest possible difficulty in getting them to work well, and so much has this been the case that we have established an independent body of workmen who are not under control of any special department, but which is charged with looking after and maintaining the service of the streets; and they keep a note of which department, gas, water, electric light, or sewage, causes the damage; and the charge of this special staff is allocated between the different departments.

1037. In other words you found the different departments of the Town Council came into collision in their operations in the streets, and in order to keep things working smoothly you were obliged to have a special street department to look after the streets?—A special staff to maintain and repair streets broken up, or rather not to "maintain," but to repair streets that have been broken up.

1038. I suppose you are afraid the telephone companies will go on trying to get other Parliamentary powers too?—Yes, that is so; and I may say that our only interest in this matter, at least not our "only interest," but what really made us take the steps we have done, is the fear that we are going to have them upon us, and that they will get legislative rights which



Sir *Charles Cameron*—continued.

will require that we should pay them (if ever we should come to carry out such operations as Edinburgh has contemplated) very handsomely for any interference we might make with their system; for instance, after having permitted them under these conditions to come into our streets, when we want to establish an electrical tramcar service we think it very hard that we should have to be at the expense of preventing induction when the company has no right to be in our jurisdiction and are only there under our suffrage.

1039. Have you any reason to think that if you were to order them to turn out under the terms of that agreement they would quietly comply with your request?—The fact is, we should not do it unless we were prepared to give our people another system. We could not compete with other cities without the use of the telephone.

1040. Have they ever given you any trouble in the way you have heard described by Sir James Russell in the case of Edinburgh by opposing Bills, or anything of that sort?—No, we never have been promoting Bills that conflicted with their interest, and, therefore, never came into contact with them.

1041. You think the telephone service in Aberdeen is wholly inadequate?—That is so.

1042. When you say that, are you referring to a general description given by the chairman of the National Telephone Company in his evidence before the Select Committee in 1892, that the service was "monstrously bad"; and do you think that that description is eminently applicable to the state of things in Aberdeen at the present time?—I do.

1043. They are all single wires; in fact, the state of matters is very much what you have heard described in connection with the other towns; is that so?—That is so.

1044. You have got a lot of figures in your evidence about foreign charges; do you speak to that matter from your own knowledge?—That is from reports that we have got from time to time.

1045. You agree that the present financial condition of the National Telephone Company renders it hopeless, in your opinion, to expect any improvement, or anything, from them?—Yes, we are of that opinion from what we have been informed by those who profess to be in a good position to judge, and from the statements that have appeared with regard to the way in which the National Telephone Company has paid for other companies which they have bought up. The statement seemed to us true. I have been informed, for instance, that they have about 3,000,000*l.* of capital that they have no asset to show for. Well, at present they are charging something over five per cent., taking the capital "all over head"; and to pay a dividend on that of five per cent. requires 150,000*l.*; and I observe that one of the witnesses for the Post Office stated that to enable them to wipe out the capital that they have no assets to meet they would require to lay aside about 114,000*l.* to the reserve fund every year. Together I make that out to be 260,000*l.*, which is equal to about 4*l.* 8*s.* per annum for each subscriber that the National Telephone Company has; and if this

Sir *Charles Cameron*—continued.

statement is correct (and I think it is) it would go to show that the estimate we have got, that an efficient service can be had for about 5*l.*, is correct.

*Chairman.*

1046. Where did you get that figure of 3,000,000*l.*?—I got the figures from a paper handed to me by Mr. Provand, the Report of the National Telephone Company for December 1894; and I may also say that I observed in the evidence of Mr. Lamb before the last Select Committee, in 1892, that he stated that, roughly speaking, he understood, so calculated, that the value of the National Telephone Company's plant 19 years hence would be about a million pounds. Now, this would allow it to be at present about 1,500,000*l.*

Sir *Charles Cameron.*

1047. Generally, your town council would prefer the Government taking over the matter; that is their view, I think, is it not?—We, of course, in this matter wish to act along with the others; and as Glasgow had put it in that way we were perfectly willing that we should be unanimous on this question; but I quite agree personally with Sir James Russell. I believe that a local system of management would be better than a national one, for this reason: that the people in the locality could correct any abuses or any neglect of duty more sharply through the local authorities than they could through a national authority; the people in charge of this matter would be more directly responsible to the citizens in the locality than they would be if it were administered from London through the Post Office.

1048. If the Government did take over the telephones, Aberdeen would be quite willing to hand over her telephones to the Postmaster General on equitable terms and without any view to making any profit out of the transaction?—We should certainly be willing to hand them over on exactly the same terms as would be arranged for the other parts of the service. Of course, it would be understood that we could not give ours at cost price if the Government were paying a premium of 50 per cent. in another district.

1049. In fact, you would require as good terms as any other district obtained?—Exactly; and we would ask no better.

1050. And if you had to buy up the National Company you would naturally require to have equally good terms with the National Company themselves?—Yes, we would require to be recouped.

Mr. *Moulton.*

1051. I understand you consider that the chief value of telephones is their local service, and not the long distance telephony?—That is so; the difference in charge would not be so great as would make it worth our while communicating by telephone as against telegraph. I do not know that there would be any serious difficulty in that.

1052. Therefore, you think it is a business that is suitable for being put into the hands of the municipality?—I do.

*Mr. Moulton*—continued.

1053. And that it has to adapt itself rapidly and perfectly to local needs?—That is so.

1054. So that you think it would be better that it should be done through municipal funds and under municipal management than that it should go through the Post Office and be subject to the criticisms of the Treasury?—That is my own opinion.

1055. You think that the people of Aberdeen would keep a sharp look-out to see that there was no waste, and at the same time would require an efficient and cheap service?—In fact, they could know what was being done on this system; whereas if we were mixed up with the whole system of the United Kingdom we should not know what particular expenditure belonged to Aberdeen, and what particular expenditure belonged to any other part of the country.

1056. Quite so; I quite understand that. Now, on the position of the National Telephone Company; you have looked at the agreement, I believe, have not you?—Yes.

1057. And you will agree that it specially reserves the right of granting competing licences, and that there is no other protection at all for the public?—I do not see any.

1058. If a company has accepted an agreement of that kind, and does not give a cheap and efficient service, do you see anything unjust to it in allowing competing licences?—I do not.

1059. Supposing you are going to allow competing licences, is there anyone that would do so much good to the public as one to the municipal authority?—I do not know any other body that could get capital at so low a rate of interest, or who would be willing to undertake the management at purely cost price.

1060. Or who would have so much motive for doing it in the best way for the public?—That is so.

Mr. *Benn.*

1061. You said just now that you did not favour competition?—Well, our reason for that is simply because of the difficulties that we have with our own departments in getting them to work smoothly together, and getting the work efficiently and speedily done. We think that if we had to consult with the National Telephone Company and with the different heads of our departments, serious inconvenience and delay would take place in the public service, and that the public would suffer; and rather than have that we would be willing to come to fair terms with the National Telephone Company, to get rid of the bother. We find considerable difficulty, and the tramway company complain that we put them to considerable and needless expense with regard to the operations they carry on on the streets, as, of course, we have not the tramway in our own hands, as Edinburgh and Glasgow have.

1062. But you are desirous that a licence should be granted to Aberdeen?—That is so.

1063. Then, as a matter of fact, you really come in support of competition: that is to say, you desire to be in a position to compete with the National Telephone Company?—I have no doubt whatever that if our contention is a good one we can require the National Telephone Company to remove at a month's notice, and to take down any

Mr. *Bean*—continued.

any wire at our request, and if we were in a position to give an effective service we would require the National Telephone Company to clear out; but we would not do that without being prepared to pay at any rate a fair return for the expenditure which they had been at within our town.

1064. I quite understand that; but the point I wish to make clear is this: that you are very anxious that Aberdeen should be in a position, if necessary, to compete with the National Telephone Company?—We want a licence to carry on the telephone service, so that it can be done efficiently, which we hold the National Telephone Company cannot do with its powers.

Mr. *Tully.*

1065. Do you think the development of the telephone service in a town would not affect the number of telegrams sent by the people in that town one to another?—My view of the matter is this, that it is the service of the public which first has to be considered, and that the question of revenue is a secondary consideration.

1066. You do not exactly see the point of my question. I want to know, if telephones were more extended in their use than they are at present, would there be fewer telegrams sent by the people living in the town from one part of the town to another?—I should say that in a town of the size of Aberdeen there would be very little telegraphic business from one person residing in one part of the town to any person residing in another.

1067. So that extending the telephone service would not affect that?—I think only to a very very slight extent.

1068. So that there would be no loss to the telegraph service if the telephone service were extended more than it is?—If it were a benefit to the community they would be able to make up the loss to the public service in some other way.

1069. It would be no loss, you think, to the telegraph service?—I do not know anything about that; but I would not be affected by the consideration.

1070. You think there would be no loss of postal business?—I am not in a position to speak upon that point, but it would not affect my opinion if there were.

1071. You think the two competing services in the town would be compensated for by the reduction in price?—As I have already stated, we are not in favour of competition in this matter, especially if the system has to be carried on underground.

1072. That is a different question. Do you think two competing services in a town would be an inconvenience?—On that account only.

1073. That is a matter of how the wires are run; that is not a matter of the double cost it would make to people to be connected with the exchanges?—On that point we accept the evidence which has been given, on which all this legislation has taken place; that an effective service cannot be provided by an overhead system, and that, therefore, powers are intended to be conferred upon the National Telephone Company under certain conditions to allow them to do it

Mr. *Tully*—continued.

underground; and it is on that account that we wish to take the matter over principally, as we cannot consent to any other body within our jurisdiction having anything whatever to do with our streets.

1074. The point I want to make clear is this: If there are two competing services in the town a great number of people will have to use both services?—As at Dundee; I do not speak from personal knowledge, but from information I have received, no serious inconvenience was felt by the citizens of Dundee when they had the two systems.

1075. Do you think the effect of the refusal of the licence to a corporation authorising them to establish a telephone service amounts simply to protecting the property of this monopolist company, whose capital is 4,000,000*l.*, and whose tangible assets, I think you said, are a little over a million?—I do not enter into the question or the argument of the "effect" in this at all.

1076. It is not a question of "argument"; I am asking your opinion of the effect of refusing a licence to a competing corporation?—I understand your question to be whether I thought the refusal was prompted by protection.

1077. No; my question is whether the effect of the refusal of the licence to the corporation would be to protect the property of this company?—Unquestionably.

1078. Whose capital is 4,000,000*l.*, and whose tangible assets are something over a million?—This is allowing for its being 1,500,000*l.*

*Chairman.*

1079. I think you said that there is one in 125 of the population who have telephones in Aberdeen?—That is subscribers; for instance, this company, of which I am a director, is only counted as one subscriber, although we have 17 instruments. We have only one or two, or perhaps half a-dozen instruments having exchange connection; the others are instruments between our different places of business throughout the town.

1080. That seems to indicate a general admission of the use and effectiveness of the telephone system in Aberdeen; those figures you have given?—Yes; but I am perfectly satisfied that it is not so general as it would be if the system were better and cheaper.

1081. That, I think, would be so with regard to the telegraphs, the post, and everything. If the charges were less, no doubt the user would be greater?—Of course in that case you have reduced the telegraph service, I understand, to below cost price. Now, I do not intend to do that with this telephone service, but we can reduce it considerably, and bring it within the reach of a very large number without making it a charge upon any other department of the public service.

1082. You have stated that the Town Council have expressed a willingness to purchase the business of the National Telephone Company in Aberdeen?—We would do that rather than have them competing with us too. Although we hold, and hold strongly, that we have entire power with our "Common Good" fund to start an exchange or any other business, we would never

*Chairman*—continued.

do it without Parliamentary powers, and any conditions could be affixed in the Bill that Parliament, in its wisdom, thought proper, as to purchase or any other matter.

1083. Do you say that you have the power to do it without coming to Parliament?—Yes.

1084. Upon whose advice is it that you entertain that view?—Upon the advice of the Town House officials; they hold that their power over the "Common Good" extends to any part of their work for the behoof of the citizens. We have about 130,000*l.* surplus of "Common Good," and that, we hold, we could use for this purpose; but we would not do this (it would not pay us so well) without Parliamentary authority, because we can borrow money cheaper with Parliamentary authority than we could without it. It has this advantage, that people in charge of trust funds can invest under the authority of Parliament; and we get the money at a cheaper rate of interest.

1085. I do not know whether you are aware of it, but the opinion of some high authorities is quite against that which you have just expressed; they are of opinion that there is no power in the corporation to carry on telephone business without express Parliamentary sanction?—It is a matter of indifference to us, because supposing we could do it we would not; we would come to Parliament all the same. If the Postmaster General grants us the licence we will come to Parliament and ask for power to carry on the business.

1086. If the corporation were to purchase from the National Telephone Company their business, would the corporation expect the State to repay them the money in the event of the State taking it over into its own hands?—I should say yes, if you were to take it over before the expiring of the lease. I understand that in 1911 the licence of the Telephone Company will come to an end. The Government is not bound then to take them over or to pay them anything. The Government could do the same with us; but if we had a 19 years' lease we would have to make our sinking fund correspond to the period when we would have to redeem our whole capital; and if the whole capital is redeemed we would say, "You are entitled to it if you ask it in the public interest without any expenditure whatever, as the public have paid us in that time."

1087. Then you would provide a sinking fund to repay to the ratepayers of the Corporation of Aberdeen the amount they had expended in purchasing from the National Telephone Company?—I anticipate that Parliament would require that; otherwise they would be giving us powers which they have not given us in any other undertaking we have gone into.

1088. You have expressed an opinion in favour of local, rather than national, dealing with this question; would you apply the same to telegraphs?—No, because, as I have already stated, the telegraph is not so much intended to be used within a limited area. Telegraphing has rather been used for a more extended area, and therefore it is necessary that a national authority should have the charge of an authority which has the right to go here or there, or anywhere,

*Chairman*—continued.

but, of course, the telephone is more a local matter, and has been recognised as such by the Post Office when they have restricted the powers of the National Telephone Company to local areas. I think the Post Office have themselves indicated that they regard this as a local matter.

1089. Are you aware that the telephone is being largely used now for communication between the large towns in the country, such as London and Manchester and London and Birmingham?—I do not see any difficulty with regard to different towns communicating. I have no doubt whatever that the Government would insist that the plant used by the different municipalities should be such as could be connected readily with their trunk wires. I cannot see any more difficulty in our local subscribers in Aberdeen getting connected with the local subscribers in Edinburgh than in the subscribers of the National Telephone Company, in the restricted area which you have tied down the National Telephone Company to, in Aberdeen and in Edinburgh, getting connection through the trunk wires now.

1090. I do not think you appreciate the question. I was going to ask you whether you are aware of the increasing user of the telephone between large centres of population; that is to say, that the telephone is every day becoming more national in its use?—I can quite understand that.

1091. Yet you think the local control in the hands of various bodies, which differ in their constitution, would be better than control in the hands of the State or of one body under the State?—Yes. Although I quite grant the force of your question, the use of the telephone is much more a local matter than an intercommunicating matter.

Mr. *Moulton.*

1092. Do you believe that there is one message from one town to another town for every hundred in the same town?—I do not think there is one. I would not say that there was one in a thousand.

1093. Perhaps I might ask this one question: do you know the number of messages from Aberdeen to other places outside Aberdeen?—No, I do not.

1094. Would you be surprised to hear that it is 16,000 in a year?—I would not be surprised to hear that, because, of course, I should say that between Leith and Aberdeen there would be a very large number, owing to the fact of several shipping companies who trade between Leith and the north having their head-quarters in Aberdeen; and I understand that a considerable amount of their business is transacted by telephonic communications.

Sir *Charles Cameron.*

1095. Might I ask you this: would it not be a very great advantage to the people in Leith who wanted to telephone to Aberdeen to have the Aberdeen connections first class, so that they could get promptly on to their subscribers and make themselves thoroughly well heard?—I understand from those who use it that it is better in

Sir *Charles Cameron*—continued.

in the evening than in the daytime; and my own experience coincides with this; I have attempted to speak with Edinburgh during the day and found it impossible to do so. Coming back to my place of business at night, I can do so when everything is quiet.

Sir John Leng (a Member of the House); Examined.

Sir *Charles Cameron.*

1096. I have asked you to give evidence before us, but you do not come before us as a Member of Parliament for Dundee?—No; I have been requested by the Lord Provost and the Town Clerk to appear generally to support the views of the Glasgow and Edinburgh gentlemen who have given evidence, but more particularly to speak with regard to the peculiar experiences of Dundee with regard to competition.

1097. Now, Dundee is one of the places where you have that competition, and where it has proved to be of very great advantage?—Dundee at present is benefitting very considerably from the competition that formerly existed. We had in the years 1880 to 1885 several remarkable positions. First of all, we had a branch of a distant company in Dundee whose rate of charge was 20*l.* This was thought by our local merchants to be too heavy. They established a local company, proposing to charge only 10*l.* That company was formed. A number of the leading merchants of the town (some of whom have become Lord Provosts since that period) were the directors. Since it was formed the telephone company, which is now absorbed into the National Company (I am not quite sure whether at that time the National had taken hold of it; however, it is now part of the National Company) at once reduced the charge from 20*l.* to 5*l.*

1098. Then the benefit of competition, and the first benefit, was to cut down the charge from 20*l.* to 5*l.*?—That was so. The local company could not go down to 5*l.*, but they went down to 5*l.* 10*s.*; the reason was that they had to pay the royalty upon their instruments. Their instruments at that time were costly; 25*l.* each they had to pay for them; they were also somewhat difficult to obtain. The local company during the whole time of its existence had to contend with that difficulty.

1099. Notwithstanding the fact that the local company had to charge 10*s.* more for its instruments than the other, it did well, did not it?—It did, remarkably. The original company, with the 20*l.* charge, only had about 30 subscribers.

1100. That is the original company?——Yes. The local company, when it started with its 10*l.* charge, had about 80 subscribers; but no sooner did the charge go down to 5*l.* and 5*l.* 10*s.* than the National Company had a considerable increase of subcribers, and the local company a very large increase. At the time of the amalgamation four years afterwards, so far as I can ascertain, the local company had about 600 subscribers and the National Company about 400. The effect of this small charge was that the number of subscribers went up from 30 to upwards of a thousand.

Mr. *Tully.*

1101. Were both the companies charging the low price?—One was charging 5*l.*, the other 5*l.* 10*s.*

Sir *Charles Cameron.*

1102. Now would you tell us the amount of capital that was required on the part of the Dundee and District Company in order to bring about that revolution in Dundee?—The company started with a nominal capital of 10,000*l.*, divided into 2,000 shares of 5*l.* each. At the date of the 18th February 1885 the shares taken up were 1,000 shares first issue, 4*l.* 10*s.* paid up; 372 shares second issue, 2*l.* 5*s.* paid up; making the total amount of capital subscribed 5,337*l.*

1103. And the result of their cheap rate was to enable them to pay a handsome dividend while they lasted, was it not?—Yes; the first year they carried 400*l.* to the reserve fund (with Scotch caution they did not divide the money that they earned), but the following year they paid a dividend of 10 per cent. and carried 200*l.* to the reserve.

1104. The National then offered to buy them up, and bought them out at 40 per cent. premium, did they not?—Yes. At the final meeting of the local company the ex-provost congratulated the shareholders on having received 9 per cent. per annum on their capital for the four and a-quarter years of their existence, and on getting their capital back with 40 per cent. of bonus.

1105. Now while they made that good bargain for themselves they made the bargain on behalf of the people of Dundee that if they allowed themselves to be bought up, the charges should not be advanced beyond 10*l.*?—That was so. They also stipulated for a year's salary for their principal officers, and a month's wages for all their workpeople.

1106. Before we go further, you were in Dundee when this competition was going on; did you hear any complaint of the inconvenience of competition?—Not the slightest.

1107. Did you hear everyone who made any remark expatiating upon the benefits of competition?—Yes, rejoicing in it, and hoping that it would continue.

1108. It did not degrade the company that introduced the competition; on the contrary, they made 9½ per cent.?—Yes, that was so.

1109. The result of that cheap telephony in Dundee was that you had an enormous number of telephone subscribers, was it not?—At that time Dundee was the best telephoned town in the country; the proportion of subscribers was larger relatively to the population than in any other place.

Mr. *Moulton.*

1110. What is the population of Dundee?—

Mr. *Moulton*—continued.

About 160,000; at that time probably it was 10,000 less.

Sir *Charles Cameron.*

1111. Now we have heard that in the case of Glasgow, and I think in the case of Aberdeen, decreases in charges for telephones have been followed up by large increases in the number of subscribers, notwithstanding the imperfection of the service?—That is so.

1112. We have been told that in the case of Glasgow in 10 years, the price charged having dropped from 20*l.* to 10*l.*, the number of subscribers has risen from 1,000 to 3,000?—Yes.

1113. In Dundee you have had the reverse operation; you have had low charges and an enormous number of subscribers?—Yes.

1114. You had then the charge raised from 5*l.* to 10*l.*; and will you tell the Committee what the result was there?—The result was that a very large number ceased to be subscribers. At that time the small grocers, dealers, butchers, and others, with a 5*l.* or a 5*l.* 10*s.* charge, almost all went in for the telephone; but when they raised the charge to 10*l.* this smaller class of shopkeepers went off almost in a body, and there was a reduction of several hundred subscribers within the first year.

1115. And since then has the number of subscribers expanded, as it has done in Glasgow and elsewhere?—It has undoubtedly gradually increased from year to year; it is larger now considerably than it was in 1885 after the amalgamation took place and the rate was raised.

1116. But while in Glasgow, between 1885 and 1895; it has increased what is the increase in Dundee; what is the number now?—I should think it has increased about one-third of the number.

Mr. *Moulton.*

1117. What is the number now?—I have made inquiries about that. In Dundee the National has now about 950 lines or instruments; but this does not represent the true number of subscribers, as many subscribers have several instruments; no return is kept of the number of subscribers.

Sir *Charles Cameron.*

1118. You gave us 600 and 400?—Yes.

1119. That is a thousand?—That is a thousand.

1120. You told us the number of subscribers subscribing to both lines; so that you have got a very fair comparison between the 950 lines and the 1,000 lines of the old companies?—Yes, I should say that the number now is approximating very nearly to what it was at the time of the amalgamation.

1121. In other words, the increase of rate has absolutely cramped the telephonic progress of Dundee during the last 10 years, whereas the decrease in rate in Glasgow has encouraged it to expand, and it has multiplied itself by three; is not that so?—Yes.

Mr. *Tully.*

1122. We have heard a lot about the loss to the telegraph service caused by the expansion of the telegraph service. Are you aware that it has been suggested to make up this loss on the telegraph service by increasing the rate of press messages to newspaper proprietors?—That I am aware of; and on grounds that I think are entirely fallacious if they come to be investigated.

Mr. *Tully*—continued.

*Chairman.*

1123. You said just now in answer to a question, or you assented to a statement made by Sir Charles Cameron, that the increase in the number of subscribers had been crushed out by the increase of rates, and that whereas in Glasgow the number had increased during a certain period three times, by 200 per cent., here it showed no increase?—That is not precisely how I wish it to stand. The view I take is that since the year 1885, when the amalgamation took place, there has been an increase of about one-third in the number to which it was then reduced.

1124. Yes; but is not the comparison between Glasgow and Dundee somewhat inappropriate; because in the case of Glasgow you are comparing the period of 10 years ago when the rates were very high with the period now when they have been reduced; whereas in the case of Dundee, you are comparing a period of 10 years ago when there was a competition which led to a very great diminution in the charges with the period of the present time, when no doubt the charges have gone up?—That is so.

1125. You are comparing Dundee at the present time with a very exceptional period of 10 years ago when the rates were driven down by competition?—No doubt at that time the low rate encouraged a great many to become subscribers, who, when the rate was practically doubled, ceased their subscriptions. Our rates are comparatively moderate now; the charge is 8*l.* 10*s.*; and when you take more instruments than one you have 15 per cent. deduction upon that on the second; and so on.

1126. You have no complaint, have you, about the rate charged by the National Telephone Company now in Dundee?—No, there is no strong feeling on that point; but there is no doubt that if the rate were lowered again there would be a very large accession of subscribers.

1127. And have you complaints against the service provided in Dundee?—The local service has the defects of the single-wire system; when you speak through it you hear a babel of tongues. From my house, which is in Fife, I can speak to Aberdeen, Montrose, Forfar, Arbroath, Perth, and I forget whether I have not other connections, but to all those places the voice of the response seems to be almost through the plaster of the wall, whereas if I speak to Dundee, which is only two miles across the river (and it is the same speaking from any point of Dundee to any other point), it is often very difficult to make out what is said owing to the induction and the noise that comes in at the Exchange.

1128. Do I gather from you that the company have given you a twin-wire telephone service?—We have twin-wires in connection with the trunk lines.

1129. The wire to your house from the Exchange, I mean?—Yes, I have a twin-wire.

1130. You have that exceptional advantage given

*Chairman*—continued.

given to you at Dundee?—I should mention that there are about half-a-dozen subscribers in Dundee who have twin-wires. In all cases the twin-wires have been introduced by large commercial houses for the purpose of improving the hearing when speaking to long distances.

1131. Are you aware whether it is a fact that the company are gradually extending their twin-wire system?—I understand so. The most important thing is that it should be extended in the large cities. Of course, the number of messages sent to a distance are comparatively few as compared with the intra-mural messages.

1132. I do not know whether you are aware that the area given to the National Telephone Company under the head of "Dundee" includes other burghs and populous districts around Dundee?—That is so; I should think it includes all those I have mentioned except possibly Aberdeen.

1133. It includes: "The Royal and Parliamentary Burgh of Dundee, and the police burghs of Broughty Ferry and Carnoustie, with the adjoining area as defined by the red line" on the map?—Yes; and I presume it would include Newport and Tayport.

1134. Newport, probably, is included within the area?—I should think so.

1135. Of course, you are aware that if the Corporation of Dundee had the municipal licence they would be confined to the municipal area of Dundee?—No; I think, first of all, the Municipalities would federate themselves; they would enter into a federal arrangement; and then the Government, working in the interests of the public, would place the trunk wires under such arrangements for the services of the Municipalities as they propose to do with a private company. I think the Municipalities would have a much stronger claim.

1136. I am dealing not only with the burghs and municipal authorities in those burghs, but with the areas in between (say) two adjacent burghs, or two adjacent populous districts: the licences, if given, might be conferred upon the populous districts and burghs; but what about the districts in between; take, for instance, the area outside Dundee, where many of the commercial men of Dundee may live?—Yes; Carnoustie and Broughty Ferry.

1137. How would you get over that difficulty, that the Corporation of Dundee would not be able to provide for them a telephone service?—Well, it would seem to me to be in the interests of the Telephone Company to come to a working agreement with the Municipalities.

1138. You recognise the fact that the Corporation would not be able to give the telephone service to these residents outside Dundee who want to be in communication with their offices inside Dundee?—At the beginning there

*Chairman*—continued.

would be difficulties of that kind, but I think they would soon melt away.

1139. How do you suggest they would "soon melt away"?—It would appear to me to be the interest of the Telephone Company to come to an arrangement with the Municipalities.

1140. Those subscribers I referred to would have to be on the two systems, so as to get the benefit of the Telephone Company outside the area and the benefit of the Municipality inside the area?—Yes, unless, as I say, the Municipalities effected working agreements with the Telephone Company.

Mr. *Moulton.*

1141. Do you see any difficulty in the outlying districts of Dundee being served by the Municipality of Dundee; would there be any difficulty in that?—I should think not. I should think the subscribers, say, in Broughty Ferry (who are very numerous) and in Newport and Tayport, would be very glad to make arrangements with Dundee to extend their wires there.

*Chairman.*

1142. Would it not be rather a new departure for a Corporation to be carrying on a business far outside the area of its municipal authority?—Dundee is already supplying water and gas to Broughty Ferry, and there are proposals in the air for the extension of the Municipality so as to include these outlying places; and I have little doubt that before many years are over they will be brought within the municipal area.

Mr. *Tully.*

1143. Would a licence such as Professor Fawcett granted for the telephone service enable the Corporation to give telephonic communication to people outside the Corporation area?—There is no limit imposed on the power of the Post Office to grant licences. That power would rest with the Post Office. I should like to add that the experience of the inhabitants of Dundee with regard to water, gas, tramways, and electric lighting has made the inhabitants, and, through them, their municipal representatives, strongly in favour of the principle of municipalisation, and that they do not see any peculiarity or distinction, with regard to the telephones, adverse to their also being included.

*Chairman.*

1144. But you do not admit that the fact that the telephone is part of the telegraph service of the country, and has been so decided by the Courts of Law, has any bearing upon that question?—I admit that it has some bearing, but I see no difficulty in working arrangements being made in the interest of Municipalities. It would not conflict with the national interest and the general working of the telephones.

*Friday, 5th April* 1895.

MEMBERS PRESENT:

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|---|---|
| Captain Bagot. | Sir John Gorst. |
| Mr. Baird. | Mr. Arnold Morley. |
| Mr. Benn. | Mr. Moulton. |
| Sir Charles Cameron. | Mr. Snape. |
| Mr. John Ellis. | Mr. Solicitor General. |
| Sir James Fergusson. | Lord Stanley. |
| Sir Julian Goldsmid. | Mr. Tully. |

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Mr. HARCOURT EVERARD CLARE, called in; and Examined.

*Chairman.*

1145. YOU are, I believe, the Deputy Town Clerk of Liverpool?—Yes.

1146. And, I believe, for many years you have had the whole responsibility and control of the Parliamentary business of the corporation?—I have had the responsibility and control for the last 14 years.

1147. And you are a member of the council of the Municipal Corporations Association?—Yes; as representing Liverpool I am a member of the association, of the council, and of all the committees of the association, including the special committee on telephones.

1148. And with the Town Clerk of Leeds you have been requested by that committee to give evidence?—Yes, the committee passed a resolution asking us to give evidence on behalf of the association.

1149. Will you state the general views of the committee as representing the association upon the question?—The view of the corporations with regard to the telephonic system is that it is now an absolute commercial necessity, and also that it is a great convenience for private and domestic purposes. Looking at it as a trade necessity it seems to the corporations most important that inter-communication between the large centres of commerce should be made as easy and cheap as possible, and that for trade it is far more important to develop inter-communication between trading centres than it is to cheapen inter-communication between subscribers in any given exchange area.

1150. Within any given exchange area?—Within any given exchange area.

1151. You mean with the trunk wire system; the communications between one town and another town?—Yes; I mean in a town like Liverpool. It is far more important for business purposes that we should have easy and efficient communication with Manchester, London, Leeds, Bradford, Birmingham, and all the other large centres that we have to deal with, than it is that we should have a little cheapening in the local exchange from one office to the other. You can send a clerk from one office to another within a radius of a mile or half a mile if necessary; but you cannot do that if you want to communicate with an office in Manchester or in London. I may say that I believe a considerable portion of the Stock Exchange business between Liverpool and London is done through the telephone, and certainly the largest portion of all business between Liverpool and Manchester. So looking at it from that point of view, the corporations consider that the whole system must be considered as a national undertaking, and not as one to be treated as a local matter.

*Chairman*—continued.

1152. If that is your opinion I suppose you think the Government have done right in taking over the trunk wire system of the telephone service?—Our view, looking at the case so far as we can do (superficially), is that the Government ought to take over the whole of the telephonic system, because the law has declared the telephonic system to be part of the Postmaster General's monopoly under the Telegraph Acts, and therefore it seems to us that it is his duty to carry out the monopoly which the law has given him; and looking at it generally it seems to us that the natural course is for the Government to take over the whole system; but if the Postmaster General and the Treasury, with their greater knowledge of the details than we can possibly have, come to the conclusion that, in the interests of the country, it is not advisable to take over the whole system, but only a portion, of course we must accept their decision as being founded upon much better grounds than we have an opportunity of considering. I may say that we anticipated that if the Government would take over the whole of the system, eventually some considerable reduction in the charges might be brought about by their working it at, say, something like cost price, and that the development of the system would possibly take place in cases where it might not pay at once, but that, in the interests of the public and to meet a public demand,

*Chairman*—continued.

demand, the Postmaster General would spend the money although he could not see directly a profit arising from it, which might not be done in the case of a company.

1153. But you anticipate advantages from the Government having taken over the trunk wire system which, I understood you to say, was, in your opinion, the most important part of the telephone system?—I do not think it follows because the Government ought to take over the whole, in our opinion, that it is a beneficial thing to the particular subscribers that they should take over a part which includes the trunk lines, excepting so far as it may be necessary to protect the public, as a whole, from a financial point of view. As far as I can see, by the Government taking over the trunk lines, the immediate effect of it will be to cause a certain amount of delay in getting the intercommunication owing to the increased number of transactions which must take place if you have to join the post offices in addition to the exchanges, before you can put one subscriber into communication with another one; but, of course, that delay can be rectified by increasing the number of the trunk lines; and if the Government are prepared to increase the number of the trunk lines to a greater extent than possibly the National Telephone Company would, then undoubtedly the effect of the Government taking over the trunk line system will be a benefit to the public; but I cannot see, from the agreement, that we are going to get any practical reduction in the charges or any greater facilities for communication excepting on the theory that the Government will increase the number of the trunk lines.

1154. But you are aware that the policy of the Government, as set out in the Treasury Minute, indicated a large extension of the trunk wire system?—Yes; and if they carry out that policy, then it will be a benefit, I think, to the country.

1155. Have you anything further to state upon the general question?—I may say that, looking at the telephone system as a national one, if the Government do not take over the whole system, but only take over the trunk lines, it then appears to us that there is only one course to be followed, and that is to place the whole of the local exchanges in the hands of one body and under one control. The inconvenience which would arise by allowing any particular area to isolate itself from the rest of the country would be very great in all commercial matters. For instance, supposing Liverpool isolated itself from the systems which pertained over the rest of the commercial part of England: In Liverpool we should not be able to communicate with any other town without an extra payment in addition to the payment made to the Government for the trunk line, because we should have to pay an extra fee to the body (whatever it might be) that had the exchange in the town that we wished to communicate with. On the other hand, no one in the country would be able to communicate with anyone in Liverpool without paying, in addition to the trunk service, the charge (whatever it might be) that the body in Liverpool would charge for using their instruments: so consequently it is to my mind a national evil if any local area is allowed to separate itself (in the way I have indicated) from the rest of the country; and in order to avoid that separation, I am strongly of opinion that the whole system of the local exchange should be under the control of one body.

*Chairman*—continued.

1156. And that body, you think, should be the State?—*Primâ facie* that body should be the State; if not the State, of course it must be some company.

1157. Then do I understand you to express a strong opinion against municipalisation of the telephone service?—I think I am only expressing the feeling of the whole of the Municipal Associations practically, in saying that we think the idea of municipalising the local exchanges is impracticable and wrong in principle.

1158. We have heard evidence from witnesses representing Scotland who have expressed, I will not say a desire for competition, but at all events the absence of any objection to competition within the same area. Have you any views upon that question?—Well, I cannot see how competition in telephones can do any good. It seems to me that it must result only in increased expense. In any town where there is any custom that is worth catering for, the National Telephone Company have practically made an exchange; they are in possession. Supposing any other company were to get a licence to compete with the National Company in that exchange only, what chance would there be of the competition of this new company being of any practical use when dealing with a company with six millions of capital, who can put their subscribers on, practically, every other exchange in the country, whereas the competing company can only put their subscribers on any other town by their subscribers paying an increased charge? In a very short time it would result, as it has resulted hitherto, in the competing company being bought out by the National Company, and then the National Company naturally have their capital unduly inflated by having to pay for this competitor, and practically every purchase they make of a competitor means unnecessarily increasing their capital on which dividends have to be paid. It is like constructing two railways when one is quite enough.

1159. That statement refers rather to two competing private companies, does it not?—Yes.

1160. Would you give the same opinion with regard to competition between the existing company and a municipality?—Suppose I take the case of a municipality attempting to compete with the company. The same circumstances would prevail—namely, that you would have the corporation attempting to compete with a company who could (what I call) "always go five better" than a corporation, in any charges that they chose to make. The corporation then would be practically pledging the rates for carrying on an undertaking which, in my opinion, ought never to be charged on the rates at all. With the competition they would have to meet, it is perfectly obvious to my mind that they would not be able to pay their working expenses; consequently, it would be a charge on the rates; and that the ratepayers would not

*Chairman*—continued.

stand for very long. Besides, I do not think, myself, that Parliament ought to sanction the expenditure of any money charged on the rates on a trading undertaking of this character, which may end in a loss to the ratepayers as a whole. The telephone system is a system for the benefit of capitalists and the more well-to-do people, and not generally of the public at large. It is not like gas and water, which are a necessity.

1161. And on that ground you think that Parliament would not be acting wisely in conferring power upon local bodies to carry on the business, with a possible charge and obligation upon the rates?—I think it would be very wrong indeed for Parliament to authorise the expenditure of money charged on the rates in carrying out an undertaking of this character. The less corporations undertake these trading businesses the better it is for the country at large.

1162. Is that the view of the association as a whole?—I think so. I am speaking not from any definite resolution on the subject; but I have been at all the meetings that have taken place when this telephone question has been discussed. I have strongly spoken upon these points myself. I have not been contradicted, nor have I heard objections raised to what I have said on the matter, and I believe myself that I am speaking the general opinion of the corporations of England when I say that municipalising telephones would be a great mistake.

1163. I believe the association represents most of the corporations in England?—Practically, the whole of the corporations in England.

Mr. *Snape.*

1164. Including London?—No; the City of London has never come into the association, and we do not consider that the vestries of London are corporations; and the London County Council, of course, is a separate body.

*Chairman.*

1165. But outside London it represents practically all the municipalities?—Practically.

Sir *Julian Goldsmid.*

1166. Except Glasgow?—In England, sir, I said.

*Chairman.*

1167. It is confined to England?—Yes; the Scotch burghs are not members of our association.

1168. Are the Committee to assume from that that you are satisfied with the present system, or have you any evidence to give with regard to the future?—I may say, so far as Liverpool is concerned, I believe the telephones are managed as well as they can be under the circumstances. We have a very large exchange area extending to a radius of several miles, and the communication is very good indeed; of course, subject to it being interrupted by occasional storms and unforeseen accidents, which must happen in the case of an undertaking of this character; but, speaking generally, I think there are very few complaints

*Chairman*—continued.

to be made against the way in which the telephone system in the Liverpool area is carried out; but what we are convinced about is this: that we shall never get the telephones as cheaply as they ought to be supplied, or as efficiently conducted, so long as the telephone company have to work under a licence which terminates in 16 years, and have to work under conditions which do not authorise them to maintain their undertaking. At the present moment their undertaking is being conducted on sufferance, and it is simply maintained by a policy of conciliation; they have no right to exist as against private owners of property; and, consequently, they must be necessarily hampered by the excessive charges they have to pay for wayleaves, and by a system of blackmailing which, no doubt, does go on periodically in case of owners who think they have them in a hole, and say: You must now pay us an increased sum of money or remove your standards; and as the telephone system is one for the national benefit, I think Parliament would be justified in endowing the company with such necessary powers as to enable them to maintain their undertaking in a proper way over private property; and, subject to the control of corporations, to utilise the streets, where it is convenient or where the corporations desire it; but that, of course, sir, being subject to very strict restrictions which ought always to accompany the endowment of compulsory powers by Parliament.

1169. What restrictions do you mean?—Well, sir, it is difficult for me to say exactly what the restrictions are that should be imposed upon this company, because, as corporations, we really know so little about the circumstances of the company; but our idea is that a Committee of the House should be appointed to inquire into the whole of the circumstances of the case, and to ascertain not only what powers are necessary to be given the company, or what powers it is advisable to give them, but also what the restrictions and conditions are which should be imposed upon them as a return for the concession of the powers.

1170. That comes strictly within the Reference to this Committee?—If it does I am extremely glad to hear it. May I, then, sir, go on to point out very generally the chief points which I think ought to be considered with regard to giving either the National Telephone Company or any other company compulsory powers to maintain their works.

1171. Certainly we shall be glad to hear what you have to say upon that?—In the first place, sir, of course you will have to decide upon what powers are necessary; and possibly the powers that the Postmaster General has under the Telegraph Acts might (subject to some modification) be all that was necessary. With regard to the powers to utilise the streets, I think that some conditions of this character should be introduced: that if a corporation desired the company to lay their lines under the streets then the work should be done by the corporation at the expense of the company, that is to say, done for them; but if in a town the corporation think it undesirable to have the streets broken up, and would prefer to

have

*Chairman*—continued.

have the wires overhead, I do not think the company should be empowered to force the corporation to allow the company to go under the streets; I mean I should leave it to the corporations to decide whether the system should be an underground system, or whether it should be an overhead system; but, subject to its being decided to be an underground system, then all necessary powers for breaking up the streets as against the public must be given; but the corporation should have the option of carrying out the work themselves, and charging the company with the cost instead of allowing the company to do it.

1172. Then the change you would propose, instead of the company (as they now hope to do) obtaining the consent of corporation either to do it themselves, or to get the corporation to do it at their expense, would be this: you think they ought to have compulsory powers to compel corporations to do the work at the expense of the company?—No, sir; I did not put it in that way. I said the question as to whether the system in any particular town, or a portion of the town, should be what I call an underground system, or an overhead system, should be left in the absolute discretion of the corporation; but that if the corporation decide that they prefer to have the system laid underground, then in that case it must follow that the company must have the powers as against the public to break up the streets, otherwise they might be indicted for a nuisance.

1173. But is not that the state of the law at the present time under the agreement which has been confirmed by Parliament?—No, I do not think so, sir. My opinion is that no corporation, unless they have some special power given them by a Private Act, has power to break up the streets themselves, or to authorise the telephone company to break up the streets for the purpose of laying their mains; it is done, but I do not think it is right.

1174. You are aware that the Manchester Corporation have entered into an agreement of that kind, are you not, with the Telephone Company?—The Manchester Corporation entered into the agreement under a clause in a local Act by which they constructed the works under the streets for the company, and charged them a rental for doing it; but it is a totally different thing, sir, to an agreement under the Act of 1892.

1175. Then may I take it that the change in the law, which you would recommend, would be that the corporations should be empowered by Act of Parliament to break up the streets for the purpose of putting down underground telephone wires at the request of the company?—Yes; the Act would not distinctly set out those powers. What the Act would do would be to authorise somebody or other to break up the streets for the purpose of laying telephone wires; then it would go on, according to my idea of drafting, to provide limitations, namely, that the work should not be carried out in a town excepting with the consent of the corporation; if the corporation gave their consent, then the company should be bound to allow the corporation to do the work themselves, if they thought fit to do it, charging the company with the cost. We do that in most of our cases in Liverpool.

1176. Does it not practically come to this: that the only change in the law that you consider necessary is the authority by an Act of Parliament to the corporations to break up the streets for the purpose of putting the telephone wires underground?—Yes; if you do not have that power given by Parliament anyone breaking up the streets might be indicted for a nuisance. I speak subject to the correction of several learned Members of the Committee.

1177. Do you suggest that the company breaking the streets for the purpose of laying underground wires, with the consent of the corporation, would be acting outside their legal powers?—At the present time, yes. I do not consider that we have any power in Liverpool to authorise the breaking-up of our streets for the purpose of laying telephone cables under the streets.

1178. Did not the Act of 1892 contemplate the company having powers conferred upon them by the Postmaster General?—Certainly, sir; but until those powers are conferred they cannot be exercised, and those powers have not been conferred at the present time as regards Liverpool.

1179. I mean did not it contemplate those powers being conferred by the Postmaster General under the draft agreement which has now become a practical agreement. You do not suggest, then, that the exercise of those powers would be contrary to their legal rights, do you?—It is perfectly true, sir, that under the agreement those powers can be conferred by the Postmaster General on the telephone company, but the telephone company cannot exercise those powers without getting the consent of the corporation, and as the corporation, if they gave their consent, would be putting the company in a strong position, and the corporation are not in a position to force these proper restrictions on the company, which I think necessary, all the corporations have practically agreed as a body to withhold their consents to the exercise of those powers under the Act of 1892 in order to have the thing properly settled by an Act of Parliament.

1180. Then with regard to the restrictions and regulations which you think ought to be imposed, what do you say as to those?—Having fixed the powers that it is desirable to give to the company, I think then that the main points for consideration with regard to restrictions are: First, what will be a fair maximum dividend to allow the company to pay on their capital, having regard to the amount of capital fairly represented by their works? By that I mean that if on investigation and inquiry (I do not say it will be so, but if it appears to be so) any considerable portion of the capital of the company is not capital upon which the public ought to be charged with a dividend then instead of fixing the maximum dividend (as you would do possibly in the case of a gas or water company) at, say seven per cent., you would fix it at some lower percentage in order to prevent the public from being charged with the payment of dividend on capital which has not fairly been spent in the

*Chairman*—continued.

undertaking. Then the next point, sir, that I think should be considered would be the fixing of maximum charges in conjunction with maximum dividends; and the maximum charge which the company should be allowed to make in the different classes of local exchange areas should be fixed; and then there should be accompanying provisions to prevent the company from unfairly favouring one exchange area at the expense of others. I think it would be very unfair, for instance, if it answered the purposes of the company to supply telephones in Liverpool, say, at just about cost price, to make the rest of the country pay the dividend on their capital. I merely give that as an illustration of what I mean.

1181. What is your charge in Liverpool?—£10 for the office; and if you have it at your house too, 8*l.* 10*s.* for the second one.

Sir *Charles Cameron.*

1182. Is there any restriction as to area?—There is no restriction as to area until you come on the trunk line.

1183. No restriction within so many miles, or within one or two miles of the exchange?—It is for the whole of the Liverpool area, which comprises, I think, three county boroughs and 10 or 11 local authorities.

*Chairman.*

1184. Including Birkenhead and Bootle, I understand?—Yes.

1185. You have mentioned different classes of local exchange areas; how would you suggest they should be classified?—Well, my knowledge of the subject is so meagre that I can only throw out a very general suggestion. When I read through the Parliamentary Memorandum of the Postmaster General I noticed that at the end of the agreement the whole of the country was practically cut up with exchange areas, and it occurred to me, sir, that many of those exchange areas were such as might be called similar in character, and that you could classify them, and then say that the maximum charge in each class should be so much.

1186. Based upon population or the probable number of telephone users?—Well, I would not like to commit myself to any suggestion of that character; I only suggest that the Committee should inquire into the point, and see whether there is anything in it.

1187. Have you any other restriction you would suggest?—Then, sir, I think that, having fixed the maximum dividend and the maximum charge, if it is thought desirable, and made provisions to prevent what I call undue preference being given as between different local areas, the question should be considered whether it is not desirable to prevent undue preference as between one subscriber and another subscriber where the circumstances are exactly the same. I do not say that it is advisable; I only say that it is a point that should be considered and inquired into. It is a principle that is adopted in the Electric Lighting Acts, and I think possibly it might apply to telephones. Then there is another point; that is, that the company should

*Chairman*—continued.

be forced to give such a number of call offices as Parliament might think ought to be given. I think that the telephone system being, as it is, an expensive article and practically limited to capitalists and people who are fairly well off, the use of it might be considerably extended (to people who cannot afford to pay 8*l.* or 10*l.*) by having call offices where it could be used, say, for some small fee, something less than a telegram. Call offices for small tradesmen would be a very great benefit when they cannot afford to pay the 10*l.* for the subscription. I do not pretend to suggest the number or the character, or how it should be done; I only point out that I think it is desirable in dealing with the subject to try to bring the telephone system more within the reach of the people, who at the present time cannot afford to have it.

1188. Is that the last restriction you suggest?—Those are the main ones, sir. There may be other matters of detail which would occur to one's mind after one had heard the inquiry into the circumstances of the company.

1189. I should like to ask you this: you propose that certain very serious restrictions should be imposed by Act of Parliament upon the company?—I do.

1190. That is to say, a maximum of dividend, a maximum of charge?—And, generally speaking, compulsion to supply.

1191. Compulsion to supply equally to all people?—Yes.

1192. Or to different classes?—Yes.

1193. And the providing of call boxes which might not be considered necessary by the company?—Yes.

1194. What is the consideration you would propose which would justify the imposition of these restrictions upon a company which has an unrestricted licence for 16 or 17 years more?—I quite recognise the fact that you cannot impose these restrictions unless you give something in return. The first thing that you give in return would be the extended powers to maintain their undertakings; secondly, I think the term of 16 years of the licence should be abolished, and that the company should be put in the same position as a gas and water company, namely, with a Parliamentary existence, subject to provisions preventing a monopoly being created which would be oppressive (or which might be oppressive) to the country; and in order to prevent that I should suggest that there might be given to the Government the power to acquire the company's whole undertaking at any time upon some reasonable notice (such as 12 months or something of that kind), on some stated basis to be set out in the Act of Parliament itself, so that the company and all their shareholders would know exactly what is hanging over their heads.

1195. You are aware, of course, that the Committee of 1892 strongly reported against any extension of the term of the existing licence?—So I understood, sir; but I may say this, that the corporations did not appear before that Committee, and even if the Committee did report against the extension of the licence for the purposes of the Government, I can only point

*Chairman*—continued.

point this out, that it stands to common sense that if a company is working under conditions which practically bring them to an end at the end of 16 years they cannot develop their system or supply so cheaply as if they had a permanent existence, and knew exactly what was going to become of them. It is obvious that they must put by, out of their revenue, a much larger reserve fund to provide against what will happen when their licence terminates than would be necessary if they had a permanent existence; and what it comes to is this: that the increased amount, or the increased sum, that they put into their reserve fund comes out of the subscribers' pockets. The extra amount they have now to pay for wayleaves and for blackmailing, as compared with what they would have to pay under fair compensation, also comes out of the pockets of the subscribers. Their dividend of 5 per cent. (which is only in the market now worth 20 years' purchase) also comes out of the pockets of the subscribers; but if that dividend was reduced to, say, 4 per cent., with a more permanent security behind it, the 4 per cent. would be worth as much in the market then as the 5 per cent. is to-day; and that would be another great saving which could be effected towards reducing the price of the telephones to the subscribers. What the corporations want is this: We want either the Postmaster General or some company put upon conditions which will enable them to supply in the best possible way, and at the cheapest possible cost, and we do not want to be hampered now at the present time, and to pay high prices for our telephones, and to have the system in an uncertain and unworkable condition, simply to benefit somebody that is to come 15 or 16 years hence.

1196. You would not suggest that the Postmaster General should be put under restrictions and obligations of that kind, I should hope?—The Postmaster General is sufficiently governed, I think, by public opinion and Parliament; I say it with all respect, sir.

Sir *James Fergusson.*

1197. I did not quite follow your proposal for the limitation of the dividend of the company. I understood you to suggest that, inasmuch as the capital had been largely swelled by the absorption of rival companies, the company should have a more moderate maximum dividend fixed for it. Is it not the case with all commercial undertakings that there is a great deal of unproductive capital arising from its initial expenses?—I agree, sir; and I do not say that my own opinion is that the company should be unfairly treated at all. All I mean to say is that the Committee in considering the question of dividend ought to have regard to the way in which the capital has been spent; and so long as you do not fix the maximum dividend at a price which would depreciate the present value of the company's shares, I do not think myself that you are doing any injustice to the company by putting them under conditions which would practically limit the increased value of their shares to some small sum compared to what it is at the present moment.

Sir *James Fergusson*—continued.

1198. But the consideration for such interference would be their possessing a virtual monopoly?—A monopoly subject to termination at the end of, say, 12 months at any time; it would be a regulated monopoly subject to acquisition by the Government whenever they thought it was in the national interest to take it over.

1199. Then, would you contemplate the withdrawal of the freedom of the Post Office to set up exchanges of their own. You would contemplate the entire transfer of the business to the company, would you?—I understand that the Post Office refuses to undertake the question of local exchanges. My contention is that all the local exchanges must be in one hand; consequently, it is either Post Office or company, and I think it is not advisable to have both.

1200. But are not you aware that in the agreements the power is absolutely reserved to the Postmaster General to set up an exchange in any area?—I understand it is reserved; but it does not necessarily follow that because the power is reserved it would be exercised.

1201. Oh, no?—Then, sir, I may point out that the agreement was made under conditions that now pertain; not under the conditions which would pertain if my suggestion of an Act of Parliament were carried out.

1202. You have said that the telephone should be brought more within the reach of the public than it is. Have you considered the extent to which it may be expected to be improved by the agreements now made with the companies?—Yes; I understood from the remarks of the Right Honourable Chairman that the Postmaster did intend to very materially increase the trunk lines, the trunk system, and to give facilities for connecting the Post Office exchanges with the local exchanges; and, of course, that will be a benefit to the public.

1203. Of course, the professed objects of the agreements made with these companies was to greatly extend the facilities of the telephones by removing the hindrances that had hitherto been thrown in their way?—I am firmly convinced that the object of the Government was to benefit the public by the agreement.

1204. My reason for asking you the question is this: You have considered the provisions of this agreement, and I should like to know whether you consider they fall short of the requirements of the public. I do not know whether you are aware of the actual conditions made; for instance, that in consideration of the company being allowed to carry their wires into the post offices, to have their wayleaves at nominal rates, and so forth, telephone messages may be written down and delivered; that they may be transmitted over the public postal telegraphs, or through the post, as ordinary letters, or delivered as express letters; that the public may be placed in telephone communication with other towns, and that the services of the officers of the Post Office shall be given without charge; all these things would give greatly increased facilities, would they not?—Undoubtedly; great benefits will arise, I believe, to the public by many of the provisions of this agreement being carried out; but, of course,

Sir *James Fergusson*—continued.

my own view was that these benefits might have been given without the necessity of buying the trunk lines; but that is merely an observation of my own.

1205. It is hardly worth considering, is it?—No, I quite agree, sir. Under the agreement which the Postmaster General has made, I believe very considerable benefits will accrue to the public, that is as to the agreement as a whole; but there are certain portions of it to which we, as corporations, very strongly object.

1206. And which you have specified?—And which, I may say, sir (perhaps it will be within your recollection), we did object to when the Bill for the Act of 1892 was introduced.

1207. Yes?—And we have not changed our opinion on the point.

Sir *John Gorst.*

1208. If all the local exchanges are in the hands of a single company, is there any good in the Postmaster General having possession of the trunk lines?—I am not sufficiently acquainted with the working of the telephone system and telegraph system to answer the question. I accept the decision of the Postmaster General and the Treasury on the subject as being the one most calculated to benefit the nation as a whole.

1209. Then do you confine your opinion to the opinion that the exchanges, at least the local exchanges, should be in the hands of a single authority?—Starting from the point that I am bound to accept the fact that the Postmaster General takes over the trunk lines and will not take over the local exchanges, then I submit that the whole of the local exchanges should be in the hands of one company.

1210. Then do I understand that you do not criticise the decision of the Government to retain the trunk lines, that you accept that decision?—I think, sir, that personally I am not, and I do not think any members of the Municipal Association are in a position to attempt to criticise the decision of the Government upon the point.

1211. Now, with regard to the facilities which you think should be given by call offices, have you ever considered the effect that that would have upon the telegraph revenue?—No. That is a subject which this Committee should consider on evidence from the Post Office Department.

Mr. *Snape.*

1212. Do I understand you to say that the opinions that you have expressed to the Committee are those authorised by the Association of Municipal Corporations?—Yes. May I read the last Resolution of the Special Committee? I may say that this is a Resolution passed by the Special Committee appointed by the Association to consider telephones, and it was passed on the 20th March 1895: "Resolved that the principles involved in the resolution of the Council of the 22nd November, 1894, should be adhered to, namely: 'That in the opinion of the Council no powers should be given to any telephone company which will enable them to interfere with streets or with the rights of individuals in property, unless statutory conditions and obligations are, at the same time, imposed on the company for the protection of the public, particularly with regard to maximum charges, maximum dividends, and obligations to supply; that the subject should be treated as an imperial, and not as a local one; and, therefore, it should be urged on Parliament that so much of the draft agreement between the Postmaster General and the telephone companies as relates to vesting in the companies the wayleave powers of the Postmaster General under the Telegraph Acts should not be carried out.' That as the Postmaster General has refused to strike out of the agreement the provisions objected to by this Association, the Corporations be recommended to refuse to give their consents under the Telegraph Act, 1892, to the exercise by the National Telephone Company of the powers of the Postmaster General under the Telegraph Acts. That the Town Clerk of Leeds and the Deputy Town Clerk of Liverpool be asked to represent the views of this Committee, as expressed in the foregoing Resolution, before the Select Committee."

Mr. *Snape*—continued.

1213. The question of buying out the companies, you say to the Committee, is not before us, and it is one that you do not recommend; in that case is the only alternative leaving the present supply of telephonic convenience in the hands of this National Telephone Company; is that your opinion, that there is no alternative to this?—I think there is no alternative except to leave it in the hands of the present National Telephone Company, but with very altered conditions to those pertaining at the present time.

1214. And some of these conditions, you have told us, mean giving very greatly increased powers to that company?—Not "very greatly increased powers."

1215. Well, increased powers?—Powers which are necessary to enable them to give us cheaper telephones; nothing beyond that.

1216. If Parliament refused to give any increased powers to the company, is it still your opinion that the single authority which you advocate should be the authority of the National Telephone Company?—Well, I can only say that when Parliament does refuse to give those powers we must deal with the situation; but as the Government has undertaken to give them the powers by this agreement, and as I understand the House of Commons is presumed to have endorsed the action of the Government in that respect, I can hardly think that the powers will not be given in some way or other.

1217. But some of the restrictions which you have advocated are not comprised in the agreement?—No.

1218. For example, you advocate the abolition of the 16 years' licence and giving a permanent control, subject to the right of assumption by the State under certain conditions?—Of course, they are not included in the agreement, because the agreement was made under the conditions which were then in force. What I am advocating is, that the conditions which were in force when the agreement was made should be substantially altered by an Act of Parliament.

1219. But

Mr. *Snape*—continued.

1219. But you have lost sight of my assumption, that is, that Parliament might refuse to give these powers under any Act, and under that state of things is it your opinion that the municipalities would still wish the monopoly to remain as at present, in the hands of the National Telephone Company?—If Parliament refuses to give the power to a company, I presume they will also refuse to give it to anyone else; and I fail to see then what benefit will accrue to telephone subscribers from that. We find ourselves now in a position when we cannot get the telephones as cheaply as they ought to be supplied, simply because the conditions under which the telephonic system is worked are such as precludes cheap telephones. What we want to do is to remove those conditions which are inimical to cheap telephones; and I have merely thrown out a suggestion for the consideration of the Committee with a view to bringing about that end.

1220. Would any of those restrictions be necessary if the municipalities had the right of telephonic supply within their own areas; that is to say, to establish a telephonic exchange within their own areas?—You could not, for instance, limit the maximum dividend that a corporation could pay, because the dividend that a corporation pays is practically interest plus the sinking fund. Supposing, for instance, that the Corporation of Liverpool at the present moment undertook to supply telephones; well, I take it that the telephonic works would be of a character where the capital ought to be repaid, at any rate, within a period of 20 or five-and-twenty years; consequently, we shall have to pay 2¾ per cent. on the money actually spent, and in addition, we should want probably another (say) two per cent. for sinking fund; consequently the Corporation would practically have to earn, over and above working expenses, 4¾ per cent. to 5 per cent., which is practically what the Telephone Company earn at the present moment.

1221. But still many of these restrictions to which you refer, such as the utilisation of the streets, and so on, would be unnecessary if the municipality had the matter in their own hands?—Quite so. Even if the legal power to break up the streets is given to the company, the exercise of the power should be in the hands of the Corporation, and the work done at the request of the company.

Mr. *Moulton.*

1222. You attribute great importance to the telephones, do not you?—Very great, particularly for commercial purposes.

1223. For intramural telephonic communication they are probably even more important than the telegraphs, are they not?—I should think so; of course I do not know what the telegraph business is, but I should imagine that the number of telegrams sent from one point of a town to another is comparatively small.

1224. For instance, take any office which has a telephone, do not you suppose that that is used 10 or 20 times as often in a day as telegrams are sent from that place to another part of the town?—I should think so; but then you must remember this: that in a great many of the large offices (take, for instance, the Stock Exchange business), the telephones are very largely used to communicate with Manchester and with London; in fact, the trunk line, I believe, which is assigned to the Stock Exchange between business hours in Liverpool, is so crowded with work that the stockbrokers have to stand in line to get "on."

1225. I am talking about the intramural business. The number of messages sent by telephones within the limits of any district are very much more numerous than those sent by telegram, are they not?—Of course; that must be so.

1226. Have you ever compared the number of intramural messages with the number of messages sent from town to town by means of the telephone?—I have no knowledge of the figures.

1227. You have told us of the Stock Exchange, and you have told us of the Liverpool usage; but taking this country as a whole, do you think that the messages over the trunk wires are one in a hundred, or perhaps one in a thousand, to the messages that are not over trunk wires?—I do not know what the relative proportion of the numbers may be; but taking it from a business point of view, as a rule, the importance of a telephone message which goes over a trunk line is far greater than probably a dozen messages that go from office to office; they are smaller matters.

1228. I am not talking about that, but about the user?—I could not at all say; I know nothing about the figures.

1229. But the user within the limits of a district is, I suppose you will agree, very large compared with the user from town to town?—Certainly; but may I suggest for one moment a remark there, that is that I think that the user from town to town is at the present moment very much limited and cramped, owing to the want of increased trunk communication.

1230. Take, again, any person who has a telephone, he will probably send 50 messages to different parts of the same town for every message that he sends to any other town, will he not?—Yes; and one reason is that you have to pay extra directly you get on the trunk line.

1231. Now this telephone system is taking up a great deal of work that was done, or would have been done, by telegraph if the telephone had not been invented?—I have been told that between Liverpool and Manchester the telegraph business is practically ousted by the telephone.

1232. And within the limits of the same town it is a still more effective competitor, is it not?—I should think so.

1233. And do not you think that it would have been a great advantage if this portion of the telegraph business had never passed out of Government hands?—Yes; with great respect to the action taken by the Post Office in the days gone by, I think myself it was a very great mistake, as a matter of policy, for the Postmaster General ever to have farmed out any portion of his monopoly.

1234. And the only satisfactory solution is to get that monopoly back into the hands of the

Mr. *Moulton*—continued.

Government, is it not?—That seems to me the most natural solution of the difficulty.

1235. Now I will take you to the period of the present licences; do I understand you to represent it to be the opinion of the municipalities of England that the period of the licence to the National Telephone Company should be lengthened?—I think it is hardly fair to put it in that way. We have gone upon one basis throughout, and that is this, we want to cheapen the telephone.

1236. To make it cheap and effective?—Cheap and effective. The only way to do that is to take away everything which forces the company to spend money unnecessarily; and one of the things which forces them to spend money, I think, unnecessarily, is the short term which forces them to put by a reserve fund which might oe applied in reducing charges if they had a continuous existence, subject to termination, at the instance of the Government.

Mr. *Snape.*

1237. I should like to ask, if I may, whether this is your own opinion, or the opinion of the corporations?—I believe that in saying that I am expressing the opinion of the municipalities. I can only say I have spoken at a great many meetings; I have there expressed these views which I am expressing to-day; I know they have raised a great deal of discussion, and I have never heard them received with any dissent; so that I simply conclude that the great majority, at any rate, of the municipalities would be of the same opinion that I am upon the subject.

Mr. *Moulton.*

1238. We know that it is an evil to have an inefficient or a dear system of telegraphy, and, of course, this Committee wants to find out how to avoid that; but taking your specific remedy, that the licence to the National Telephone Company should be lengthened or made perpetual, will you mention the name of any one large corporation in England that you can tell this Committee is definitely of that opinion?—I do not think they have ever expressed an opinion upon the subject in that way, and it is hardly fair, I think, to put it in that way. The right way to put it, I think, to my mind, is that the municipalities desire to remove everything which tends to the increasing of the price; and one of the ways to remove it is to remove the obligation to set by this big reserve fund. We do not propose to create a monopoly for all time, because I propose that the Government should have the power, at any time, of giving 12 months' notice to buy up the whole undertaking upon some reasonable terms, which should be stated definitely in the Act of Parliament.

1239. No such scheme as that has been before the municipalities, has it?—I have spoken about it in Committee; and I spoke about it, I think (the Right Honourable Chairman will say if it is correct) when I had the honour of speaking before him not very long ago on the question of the agreement.

*Chairman.*

1240. That was so?—I did speak about it at that time.

Mr. *Moulton.*

1241. Of course the municipalities are desirous to remove everything that occasions cost in the service, but they would only do so provided they could do it at not too great a sacrifice. Now I will ask you, has this question of the prolongation of the licence to the Telephone Company ever been considered by any large municipality that you know of, and approved of, as a means of lowering the cost of telephones?—Not in the sense in which you put it.

1242. Have you read the agreement between the telephone companies and the Postmaster General?—I have.

1243. You have expressed your opinion strongly against competition in the same area?—I think competition must end in increased expense.

1244. Therefore, you look upon it as impracticable?—It is to my mind just as impracticable as having competition with the water companies in the same area.

1245. In that agreement is there any means by which either a cheap or efficient service can be secured for the public, excepting by the threat of competition?—I am not responsible for the agreement, and I really cannot say what can be done under it; I only know the portion I object to.

1246. Can you point to anything, except the power of granting new licences, which enables the Postmaster General to secure any benefits for the public?—I think the point, sir, that you have in your mind is the same that I have in mine; namely, that the powers are to be given in this agreement to the telephone company; but the restrictions are left to be settled by the corporations as best they can settle them; and my contention has always been that the corporations are not in a position to be able to make those conditions properly.

1247. I am not dealing with the question of streets?—No, I am not dealing with the question of streets either; I am dealing with the question of the telephone company in connection with the subscribers.

1248. Are there any powers, even to corporations, to require either an effective or a cheap service from the company?—I do not think myself that under the agreement the corporation can bring about either a cheap or an effective service to the public, except so far as the company choose to give it.

1249. Is it not the same with regard to the Postmaster General, except so far as the power of granting rival licenses is concerned?—But the Postmaster General would be, what I may call, subject to Parliamentary control.

1250. Has he any powers to require either a cheap or an effective service under that agreement?—Not that I am aware of; but I speak without remembering the whole of the agreement.

1251. Then, if competition be not an effective weapon, the public are without any protection under that agreement?—I am afraid that if those provisions of the agreement which relate to endowing the company with the powers of the Postmaster General are carried into effect by the Postmaster General, the public, generally, will be very much damnified; and it is for that reason

Mr. *Moulton*—continued.

reason that I have so strongly objected to those provisions in the agreement throughout.

1252. Now you have not given special attention to the prices at which telephonic communication is given in other towns, have you?—No, except what I have been told.

1253. Have you examined into cases in which there has been competition?—I believe there was a case in Manchester where they had competition, and I have been told by friends of mine there that the result has been that they have had to subscribe to two undertakings, and the two subscriptions came to more than one.

1254. Is that the only information you have, because I will not press you if that is all?—That is simply what has been given to me in talking about the thing generally.

1255. Supposing that the price of telephonic communication was brought down considerably (we will say to 5*l.* or 6*l.* a year), do you doubt that there would be a very much larger number of telephones taken?—Reduction of cost, I think, almost invariably leads to increased consumption.

1256. You were talking about the telephone being an "expensive article only for capitalists"; 5*l.* a year would be about 2*s.* a week, would it not?—I think that calculation is correct.

1257. Do not you suppose that if the price was brought down to that, a very large number of small business men would find it worth while to have them?—I believe so; and it is for that reason that I am advocating the reduction of cost.

1258. In that case you would not describe it as an expensive article, only for capitalists, would you?—My observation with regard to a 10*l.* subscription would be proportionately reduced, if I may so.

1259. "Capitalist" is a rather big word for the persons who would be the users under those circumstances, is not it?—I do not think I used the word in the limited sense in which you put it; I think I said the present charges for telephones prohibit it being used by people who are not capitalists or fairly well off.

1260. Now, supposing a Municipality were to take up the telephone business, would it not be the most effective competitor of the National Telephone Company?—I do not see that it would; because if the Corporation undertakes any works, it practically has to pay a dividend, whether it earns it or not, or it has to fall back upon the rates.

1261. This dividend of 4¾ per cent., you mean?—Whatever it may be; at any rate between 4½ and 5 per cent.

1262. That is to say, interest plus that which is made to be the sinking fund?—Yes, the sinking fund.

1263. That is not so much as the dividend of the National Telephone Company?—I believe the National Telephone Company pay 5 per cent.; and if it costs the Corporation 4¾ per cent., there is not very much in it.

1264. Do you know whether they put by a sum of money in view of the termination of their licence?—I believe that last year they put by something like 70,000*l.*, which, if it had not been for the 16 years' term, might have been applied in reducing the cost of telephones.

Mr. *Moulton*—continued.

1265. So that in addition to the 5 per cent. there is this money that they are putting aside to replace their capital?—Yes.

1266. Then the 5 per cent. is on the amount of capital as it stands in their books?—Of course, it must be so.

1267. Which includes large sums paid for buying out competitors?—That is only a matter that I know by hearsay and not by personal observation.

1268. Supposing, then, that you wish to introduce competition, are not you of opinion that the most efficient competition would be that of the Municipality?—No. My experience of local government leads me to this conclusion: that if a thing can be done by a Corporation for a fixed sum of money, it can be done by a contractor or a company for a less sum, because there is always a certain amount of expense in connection with a public body which a contractor manages to save, and to make a profit where a Corporation would practically only pay its way.

1269. You have acquired your waterworks, have you not?—We have; and that is a very right thing to do.

1270. You have acquired your gasworks also?—We have not, I am sorry to say.

1271. Oh! that is Manchester; you have acquired your waterworks and wish to acquire your gasworks?—We wish to acquire the electric lighting, if we can get it at a reasonable price.

1272. And, as far as you are concerned, you would like to acquire the gasworks?—Generally speaking, I think the gas and the water ought always to be in the hands of the local authority.

1273. I want to know why telephones should not be in the hands of some public authority; it is exceedingly important, is it not, that they should be worked in the interest of the public at as cheap a rate as possible?—I do not think myself that the telephone system is of such a general nature that Parliament would be justified in allowing a Corporation to pledge the rates for the purpose of supplying it. It would be, to my mind, a far sounder argument or proceeding were you to municipalise all the bakers' and all the butchers' shops than to municipalise the telephone system.

1274. It is a portion of telegraphy which has been taken over by the State, the great public authority, in the interest of the public, is it not?—That is because it was vested in the State, to start with.

1275. The State took over the telegraphs from private companies, did they not?—Yes; in 1868 I think it was.

1276. Do you consider that that was a wrong step?—I believe myself that a properly regulated monopoly is much better for any public service of that character, generally.

1277. If that is your opinion with regard to the telephone, is it not equally part of your opinion as to telegraphy generally?—I cannot go back upon legislation of 1868. You asked me for a sort of abstract opinion as to whether it was desirable.

1278. Can you draw a line between telephones and telegraphs, and explain why it is not advan-

Mr. *Moulton*—continued.

tageous that the telephones should be in the hands of a public authority as well as the telegraphs?—I do not think the telephone system is one of such a general character that it justifies the thing being charged on the rates.

1279. It is even more general, is it not, than the telegraphs; is it not more largely used per head by those who use it than telegraphs?—Yes; the telegraph is in the hands of the Government, and that is a different thing to a local authority altogether.

1280. You think it ought to be in the hands of some public authority?—What?

1281. The telephone?—The telephone ought to be in the hands, first of all theoretically of the Government, but if the Government will not have it, it ought to be in the hands of a properly regulated company.

1282. And not of a public authority?—I do not think it is within the function of any local authority to undertake the supply of the telephone system.

1283. Now let me see the objection you raise to it. First of all you say that in all towns the telephones ought to be in the hands of the same authority; now will you explain what is the need of that?—Because the necessity of intercommunication between, not only large, but all centres of trade is so great that it would be a very great evil if one or two of these systems were isolated from the rest.

1284. I will just take Manchester and Liverpool: Would it make the slightest difference with regard to interchange whether they were in the same or different hands?—Yes; because every subscriber in Liverpool who wanted casually to telephone to Manchester would have to send to Manchester to get one of their catalogues to commence with; otherwise he would not know what number to ring up. In addition to that he would have to pay the additional 3*d.* or 6*d.* for the pleasure of doing it.

1285. Will you explain to me why?—Because the agreement with the Postmaster General does not provide that the competing companies in the exchanges shall give inter-communication.

1286. I do not understand how they compete; as many messages go from Manchester to Liverpool as from Liverpool to Manchester, do not they?—Suppose, for instance, the Manchester Telephone Exchange belonged to the Manchester Corporation, and the Liverpool Exchange belonged to the National Telephone Company; unless some provision were made by Parliament to compel the Manchester Corporation to allow their instrument to be used by the subscribers in Liverpool, and *vice versâ*, they would not be able to use them, unless they paid the charge demanded.

1287. Whose interest would it be to put that charge on?—It is in this agreement.

1288. I will take a case; we will say that the Liverpool Corporation and the Manchester Corporation have the telephones in their own hands; whose interest would it be to charge as against the other town?—I think it is obvious that all the towns would not do the work for other subscribers.

1289. I want to know why?—Because, if you are not obliged to do anything without being paid for it, as a rule, you like to get paid for it.

1290. Let us see how you are paid for it; for instance, take the letters to France; does France get any of the postage on those letters?—I do not know anything about that. All I know is that in this agreement with the Postmaster General there is this provision——

1291. I ask you why they should be isolated, because the exchanges are in different hands; it is as great an advantage to Liverpool to be able to telephone free to Manchester as for Manchester to be able to telephone free to Liverpool, is it not?—Unfortunately, we have not that advantage, and I do not see how we are going to get it.

1292. I want to know why there would be any need of a charge if they were in different hands, any more than there would be if they were in the same hands?—I do not know about there being any "need" of it, but if the Manchester Corporation owned the telephones in Manchester, they would not allow the National Telephone subscribers to use their instruments without paying some charge.

1293. But why not if, in return, they got the privilege for their subscribers to telephone to Liverpool?—I do not know "why not," but I assume that they would not do so; and this agreement bears out my contention, because it makes express provision to limit the charges.

1294. I want to know if you can give me any reason why it should be more to the interest of the one than to the interest of the other to impose a charge?—It probably might be the best public policy to have no charge at all; but when you are dealing particularly with local authorities, they always make a charge if they possibly can; but then I may point out this, that the questions are all asked on the assumption that the exchanges in Liverpool and Manchester are in the hands of the corporations. Now the corporations can never get the thing into their hands until they have by competition practically killed the National Company who are there. Well, I should be very sorry to see the Corporation of Liverpool attempting to compete on the question of price with the National Telephone Company with their 6,000,000*l.* of capital behind them. I am afraid there would be a very considerable charge on the rates at the end of the first year if they attempted to do anything of that kind.

1295. Would not they also have the Government to compete with the Telephone Company?—As far as I can see the telephone is the only thing the Government make any profit out of. They lose about a quarter of a million a year which they give to the Press; they also lose on the sixpenny telegrams; and they make a clean profit of 70,000*l.* out of the telephones for doing nothing at all.

1296. Do you call that a "clean profit"?—It is 10 per cent. clean profit, so far as I can see.

1297. Does not that displace a large portion of their telegraphic business which they had the monopoly of?—That is not the fault of the telephone subscribers, but the fault of the Government in days gone by.

1298. Do

Mr. *Moulton*—continued.

1298. Do you call it a net profit when they have a very much smaller number of messages over their own wires?—It is net profit in this sense, that the cost of getting that 70,000*l.* is *nil*, and the amount got is 70,000*l.*

1299. You call that a net profit even when it is obtained by a sacrifice of business which would have brought a profit because it would have been a profitable user of their lines?—I do not think the two things are, so to speak, properly connected, if you come to a question of ascertaining what is profit as against gross receipts.

1300. Now, with regard to the question of the powers of a corporation; have you examined the statutes to see what powers are conferred on the Telephone Company?—No powers are conferred on the Telephone Company.

1301. None?—No.

1302. You said that the Corporation could not put wires underground because it had no statutory powers for doing so. Do you suggest that they cannot put them underground for the telephone companies?—At the present time, no; that is my opinion, subject to correction.

1303. Have not the telephone companies the power of putting their wires underground subject to the consent of the Corporation, who can impose terms?—They have not the slightest power at the present time. They will have the power if the Postmaster General exercises the provisions of the agreement, and gives them the power.

Mr. *Tully.*

1304. You have said that the telephone is for the use principally of capitalists, and people who are well-to-do?—It is generally used by people in trade and for commercial purposes, and by people who are fairly well off, if they have it in their houses.

1305. Because it is for the use of (or a luxury for) the rich, you are against the Corporation spending any rates on a rival or competitive system?—Yes; I do not think myself that it is a business of a character which justifies even the running of the risk of having to charge it upon the rates, which are paid by everybody, while the large majority of the ratepayers do not use the system.

1306. You advocate the extension of the powers of this National Telephone Company because you say it would be for the public benefit?—I advocate the extension of the powers because it would necessarily follow that there would be a reduction in charge, according to my way of doing it.

1307. As against the corporations, you think it is a luxury for the rich, and in favour of the company; you think it is for the benefit of the public?—No, not at all; it is for the benefit of the same people in either way; but if you can make any provision which will have the effect of reducing the charges, I think then you extend the area, so to speak, over which the telephones would be used; that is to say, you enable a number of people who would be willing to pay 5*l.*, for instance, to take it, who would not be willing to pay 10*l.*

1308. You are for saving the rates; but we were told here by a Post Office witness, that on account of this company having got hold of the



Mr. *Tully*—continued.

telephone business of the country, the telephone business had superseded the telegraph business to such an extent that at the present time the telegraph business is being worked at a loss of a quarter of a million a year?—Yes; and I also heard it stated that about 300,000*l.* a year goes into the pockets of newspaper proprietors.

1309. The point I want to ask you about is this: we learned here from an official witness who was examined that they lose a quarter of a million a year on account of the telephone business superseding the telegraph business; one of the Post Office witnesses stated that?—I did not understand that; I understood that the net loss on the telegraph business, generally, was 240,000*l.* a year, and that probably a considerable amount of that loss was owing to the competition of the telephones with the telegraphs.

1310. Yes; the witness said that it was largely due to that fact. The general taxpayer has to make up that loss, has he not?—He has.

1311. And although you object to the Corporation taxpayer having to provide a competitive system, you do not object to the general taxpayer having to pay towards the loss on the telegraph system?—Yes, I do; I do not think there ought to be a loss on the telegraph system; I do not see why Press telegrams should be carried at less than cost price at all.

1312. We are not considering the question of Press telegrams now?—That is involved in the 240,000*l.* loss.

1313. But we were told that the telegraph revenue in 1891 showed a surplus of 68,000*l.* when they were carrying the Press messages the same as they are now?—All I mean is this, that if certain portions of the telegraph monopoly are being carried on at a loss, I think it is rather unfair to the rest of the country; I think the telegraphs ought to be made to pay their own way somehow or other.

1314. But you do not object at all to part of the telegraph business being given over to the monopolist company who have watered their capital up to the extent of four and a-half millions. You would like the newspaper proprietors to pay for the loss which has been occasioned by giving over that business to this company?—Of course, as I have said, I think it was a mistaken policy for the Postmaster General ever to have parted with any portion of his monopoly.

1315. Exactly; that is what we have to deal with, the results of this mistaken policy; we want to try and get rid of the results of the "mistaken policy." Under this agreement, if it is carried out, will not the company be practically restricted to the local areas?—Yes.

1316. The trunk wires will belong to the Government?—Yes.

1317. And will not the corporations if they get licenses be restricted to local areas?—If a corporation got a license I think it would be restricted to its own area. If the company had the whole of the exchange areas in its own hands, there would practically be only one body to deal with.

1318. But as regards all those great disadvantages you spoke about, the trunk wires and the difficulty of communicating between

Mr. *Tully*—continued.

towns; when this agreement is carried out, will not it be the Post Office who will have to provide these trunk wires?—Yes.

1319. And the company will have to provide for the local areas?—Yes.

1320. And if the Corporation were allowed to have the license, would not they be confined to local areas?—Yes. The disadvantage would be this (as I pointed out in answer to Mr. Moulton), that if you have the local area in one town, belonging to one body, and the local exchange in some other town, belonging to another body, then, in addition to the trunk wire charge, there will be a further charge for going on any other company's system.

1321. Would not the price be considerably reduced. We were told that in Glasgow when there was a threat of competition it was reduced from 20*l.* to 10*l.* to each subscriber?—I do not know whether that was the fact or not; but it is obvious that a Corporation cannot work at less than the working expenses, plus 4½ per cent. at least, unless they are prepared to charge the rates with the cost of the telephones, which I maintain would be very wrong.

1322. The rates are paying already for it, are they not, because the telegraph system is losing?—I do not think the fact that the telegraph system is worked at a loss is at all a justification for the municipality throwing upon the rates a loss upon the telephones.

1323. You say that because the Corporation would have to pay this 5 per cent. they could not compete with this company that has six millions of capital behind it; are you not aware that this company, in order to pay a dividend on that six millions of capital, must put on to each subscriber a charge of 4·8*l.* a year?—Well, if it costs 4·8*l.* a year to pay the 5 per cent dividend, it would not cost very much less to pay 4¾.

1324. Their tangible assets, we were told, are something over a million and a-half; they have about 3,000,000*l.* of capital which they have used in buying up, or swallowing up, other companies; to pay a dividend of 5 per cent. on this watered capital requires an extra charge of 4*l.* 8*s.* to each subscriber for the year?—May I say I have no knowledge of how the capital of the company has been raised or spent, and I can hardly answer questions on assumptions, which I do not think have ever yet been proved.

1325. But without having this knowledge, you are come here to tell us that the Corporation would have to pay what would be equivalent to 5 per cent., and that the company pays 5 per cent., and that therefore the Corporation could not compete against them?—I have the knowledge that the Corporation would have to pay what would be equivalent to a dividend of somewhere between 4½ and 5 per cent., for the simple reason that we have the figures; we know we should have to pay 2¾ per cent. on the money we borrowed; we should also have to pay the capital back within twenty or five and twenty years, which would involve another 2 per cent. for a sinking fund.

1326. The point I want to make clear is this: suppose the company has to pay on tangible assets, which represent about a million and a-half, and suppose the capital is increased to four and a-half millions, would not the charge to each subscriber be greater to pay the dividend upon the four and a-half millions than it would upon the million and a-half?—If you have the same amount of net revenue in the one case as in the other, and have only to distribute it between a million of shareholders, as against five millions or four millions, why, of course, the million must get more in proportion than the four millions.

1327. The net revenue is produced by the charge to each subscriber, and will not the charge to each subscriber be less if the 5 per cent. dividend is only to be paid on a million and a-half, instead of on four and a-half millions?—Yes, that would follow.

1328. To pay that dividend means an additional charge of 4·8*l.*, I believe, to each subscriber?—I will take the figures from you, sir, if you have calculated them.

1329. I have them here; they were given here by a witness on the last day, Mr. Bisset. Supposing that there was competition between the Corporation and the company, you say that the company would have to reduce their price, or would reduce their price, below what the Corporation would charge?—The company would reduce their price to whatever point was necessary to enable them to retain their existing subscribers, and to enable them to induce other would-be subscribers to go on their system, instead of on the Corporation system.

1330. So that the first result would be that it would be cheaper to each subscriber and the service, probably better?—I do not think it would follow. The first result would be, if you had any quantity of subscribers attached to the competing undertaking, that you would have a duplication of the wires overhead, or the inconvenience of breaking up streets doubled; and my impression is that it would very soon result in one or the other of the undertakings shutting up, and the other absorbing the whole thing.

1331. You think it would result, at all events, in the people getting a cheaper service?—It might be possible that they would get a cheaper service for the first short period; but I do not see that it would be very much benefit to the present subscribers, because they would not be allowed to give up their telephone instruments to the company.

1332. We are not talking of "present subscribers," but of the general public, in whose interest you are speaking?—I am speaking not so much of the public as of the present subscribers, who want to get the thing cheaper; and the present subscribers could not give up their instruments to the National Telephone Company probably for three or four years after the competition started.

1333. Take Glasgow, where each subscriber at present has to pay 10*l.* for his service; there the Corporation are willing to supply (if they get the license) at 5*l.* to each subscriber; it would be a great advantage to those subscribers to get the price reduced, would it not?—It is all very easy to say you would supply at 5*l.*, and that it would be a great advantage; but before doing that you must show that you can construct it at a price which will enable you to benefit the subscribers and to pay your way as well.

1334. The

Mr. *Tully*—continued.

1334. The officials of the Corporation of Glasgow gave us figures which justified them in that belief?—I must say that my own opinion of Parliamentary Estimates is not such that I should consider statements of that kind very seriously.

1335. And in Glasgow they have this disadvantage, that they have only a single-wire system, and if they had a competition licence the corporation would undertake to provide a twin-wire system?—If the twin-wire system really was necessary, I believe myself that the National Telephone Company would put it up, provided they were put in the position which I say they ought to be put into.

1336. You would not like the corporation to be put in the position of having the twin wire?—I should be very sorry indeed to see corporations endowed with any power to construct telephones.

1337. But if the corporation got the licence to put up a more efficient system, that is to say, a twin-wire system, and could supply the service at 5*l.* to each subscriber, say, in the city of Glasgow, would not that be a great advantage to the people there?—I do not think so; I would very much rather Parliament forced the National Telephone Company to put it up, if they thought it was really the right thing to do.

1338. These are excellent remedies that you are proposing Parliament should adopt, but we have to deal with the tools to our hands?—I understood from an observation made by the Right Honourable Chairman that it was within the power of this Committee to consider these suggestions; and for that reason I throw them out.

1339. If there were two competing systems, for instance, in any area, of which the corporation had one and the company had another, do not you think that when the Government proceeded to take over the telephone system they would have their pick, and could choose between those two systems, and take whichever would be the best?—My impression is that if the municipality once got hold of any system that paid it, so to speak (yielded it a profit), the Postmaster General would find it a very difficult thing to take that system out of the hands of that municipality; I have no doubt he might easily acquire the thing if they were working it at a loss.

1340. Would it not be better for him to have the pick of the two systems if he was going to take over the telephones?—Yes; but if the system he wanted to take over belonged to the municipality, I think the Postmaster General would find it a pretty hard nut to crack to get hold of it, if it was paying.

1341. Would not he find it "a pretty hard nut to crack" to get hold of this company and exterminate all the rival companies?—Yes; but I am suggesting that powers should be given to come to an arrangement by which the Postmaster General should be able to take it over when he thought fit.

1342. He cannot do that without consideration, and the consideration you propose is to give to the company perpetual monopoly or a licence for ever?—It cannot be a "perpetual monopoly" if it



Mr. *Tully*—continued.

is subject to termination at any time on 12 months' notice.

1343. Is it not possible that the Government would have to pay (as in the case of the telegraph companies) 17,000,000*l.* for what it was supposed only cost 3,000,000*l.*?—I suggest that the Act of Parliament should expressly define some reasonable basis for the purchase, and not leave it to arbitration.

1344. When the Act of Parliament defined that the trunk wires should be taken over at the cost price it was found, was it not, that the books of this company did not record the cost price?—I am not advocating "cost price" at all. I do not think, myself, that the cost price really is the proper basis to go upon in buying up any undertaking. The value of an undertaking is what it is really worth for the use to which it can be put.

1345. There is one other point under this agreement, page 19, Clause 12; you have read that, have you?—Yes.

1346. That provides that the Postmaster General, at the request of the companies, must lay the underground wires in the streets?—Not generally; only in order to connect two exchanges.

1347. And those are the principal underground wires, are they not?—No; I understand this, that the underground lines connecting the exchanges would simply be a sort of local trunk line, and that, at the most, they could only pass under a few streets which would lie between the two or three exchanges.

Sir *Charles Cameron.*

1348. I wish, in the first place, to understand exactly the evidence which you give as a representative of the municipal corporations, and to distinguish that from the views you have explained to us which are merely personal. You have handed in here some resolutions come to by the Telephone Committee and by the Special Committee. That of the Special Committee of the 20th March explains fully, I presume, the views you were sent here to represent on behalf of the association?—Not altogether, sir. These resolutions have been passed after discussions which have taken place from time to time on the subject, and I have been speaking rather from what I know was the line of discussion and the general expression of opinion than, possibly, on the exact wording of these particular resolutions.

1349. Well, we will come to the exact wording of these particular resolutions, which are very distinct. Apparently the only objection that the Association of Municipal Corporations takes to the proposal is to that portion of it which relates to the vesting in the company of the wayleaves power under the Telegraph Acts?—Those are the only provisions that we specially objected to in the agreement.

1350. And from your objection to these provisions in the agreement you passed a resolution to the effect that "the corporations be recommended to refuse to give their consents under the Telegraphs Acts, 1892, to the exercise by the National Telephone Company of the powers

Sir *Charles Cameron*—continued.

of the Postmaster General under the Telegraph Acts"?—Yes.

1351. So that practically the association objected only to this one portion of the agreement, specifically at all events. Their recommendation was directed to that one point, and it was to the effect that the corporations connected with the association should not "give their consent" "to the exercise by the National Telephone Company of the powers of the Postmaster General under the Telegraph Acts"?—That is so far as the particular agreement was concerned; on the general subject we go much further.

1352. Let us stick to that, because "on the general subject" it appeared to me that you entirely agreed with the proposals of the agreement between the Post Office and the Telephone Company?—I did not intend to give the impression that I was giving evidence in support of the agreement between the Postmaster General and the Telephone Company. What I intended, sir, to indicate was that from the view of the corporations, with such limited experience of the subject as they have, it seemed to them that the natural course was for the Government to take over the whole; but as the Government have only decided to take over the trunk lines we must accept that as being the best for the public.

1353. You accepted the decision of the Postmaster General to take over the trunk lines, as calculated to benefit the nation as a whole; I think those were your words?—I assume, sir, that the Postmaster General would not enter into any agreement which he would not consider for the benefit of the nation.

1354. We need not state the reason, but you agree to the assumption of the trunk lines by the Postmaster General?—Yes.

1355. That is an important portion of the agreement which you agree to; you tell us you are very anxious to see inter-town communication improved?—Yes.

1356. You are aware that the Postmaster General has under the Act of 1892, already spent 300,000*l.* in improving inter-town communication?—Yes; and that he is extending it still more.

1357. And you are aware that a million of money is provided for it?—I understand that a portion of the million has to be applied to buying up the existing trunk lines, and the balance towards improving and extending.

1358. At all events there are many thousands to be spent in improving and extending?—Yes.

1359. Therefore, with that portion of the policy of the agreement you entirely concur?—Yes.

1360. You propose that the number of call offices should be increased, and increased to such an extent, you said, as Parliament should consider necessary?—Yes.

1361. Are you aware that under the agreement with the Postmaster General an enormous increase in the number of call offices will be effected; every post office will be made into a call office?—If that is so, then it would not be necessary to make special provisions in an Act.

1362. You may take it from me (and I speak

Sir *Charles Cameron*—continued.

in the hearing of the Committee) that as a matter of fact, under the agreement there will be an enormous accession to the number of call offices through the post offices being made call offices for telephonic purposes?—Then, to that extent, sir, it will meet my observations.

1363. You agree with the proposed agreement on that point?—Yes.

1364. You fear an increase of inter-town charges, I understand you?—Owing to the agreement, do you mean?

1365. Yes?—As far as one can see from the agreement there will not be, at present, at any rate, any reduction; and, of course, that means that there may be a possibility of increase; I believe there will be an increase in some cases, and in others a reduction.

1366. The rates fixed are maximum rates in inter-town charges; and the Postmaster General can, on the pressure which Parliament sometimes brings to bear upon him, reduce the charges, if he thinks fit?—I do not think that the increase, even if there is any, would be of what I may call a material character; and if the result of this agreement should turn out to be that the trunk lines will be much increased, and the facilities for inter-town communication increased, why then the extra charges would not be really a loss to us.

1367. So that, practically, you agree with the entire of the agreement except that portion which relates to the streets?—Practically so, sir. What we object to is the Postmaster General throwing on the corporations the necessity of protecting the public against the action of his own licensees.

1368. There is one portion, and a very important portion, of the agreement with which you are not in accord, and that is, that portion of the agreement which expressly provides for the rights of competition; paragraph 18, for instance, which provides: "Nothing in these presents contained shall prejudice or affect the right of the Postmaster General from time to time to" grant competing licences; you dissent from that?—I do not dissent from the agreement reserving to the Postmaster General every possible right that he thinks it necessary to reserve. I understood, I was asked rather, whether I thought the competition would be beneficial.

1369. Your opinion is that the competition would be detrimental?—I may say that it is the general opinion of the corporations that it would be impracticable.

1370. Has the association of municipal corporations ever passed a resolution on that point?—We have not discussed that specific point in that way.

1371. You have had no resolution whatever upon it before you?—Not in the shape in which you put it.

1372. Has the Liverpool Corporation ever discussed the point and come to any resolution upon it?—The gentlemen appointed to represent Liverpool have often discussed it.

1373. I am speaking of "the Corporation." You have told us that the Municipal Corporations Association have never adopted any resolution against competition; and I understand that the Liverpool Corporation has never passed any resolution

Sir *Charles Cameron*—continued.

resolution against competition either?—No, sir; but I should like to explain.

1374. I will take the fact?—That is so; it is perfectly correct.

1375. You are aware, on the other hand, that various corporations have passed resolutions in favour of telephonic competition, and that certain corporations have applied for telephonic licences?—I understand that some of the Scotch corporations have done that.

1376. Exactly; and I presume that, as the Scotch corporations do not wish to force that policy upon any other corporation, and do not claim the right to force that policy upon any other corporation, there is no reason why they should not be allowed to advocate their own views in their own way, and to carry them out in their own way, subject to their convincing the Postmaster General, is there?—Well, speaking generally, I do not think there is, excepting to this extent, that I think it would be a disadvantage to everyone who wanted to communicate with Glasgow to have to send to Glasgow to get the catalogue to find out the number of the subscriber with whom they wanted to communicate.

1377. Is there much communication between Liverpool and Newcastle?—I would rather somebody from the Telephone Company should answer that question. I do not know anything about it.

1378. I do not ask you as to detail; but, as a matter of fact, you have told us, and as we all know, Liverpool is a very large commercial centre, and Newcastle is also a very important town; have you ever heard any complaint as to telephonic communication between Newcastle and Liverpool?—I cannot answer that question.

1379. You can tell me whether you have ever heard any complaint?—I have never heard any complaint, but I have never heard of anyone telephoning there.

1380. Should you be surprised to hear that there are two telephone exchanges in Newcastle?—At Newcastle there is the Government and there is the National Telephone Company.

1381. And notwithstanding that you have never had any complaint as to the difficulty of telephonic communication between Liverpool and Newcastle?—No; but I should imagine——

1382. We do not want imagination; we want facts; you have not had any complaint?—I have not heard of a complaint because I have not heard of a transaction taking place.

1383. There must be a large amount of communication between Liverpool and Newcastle?—Yes, certainly.

1384. And you have not heard any complaint?—May I point out that the reason why there has been no complaint is very probably this, that the shipowner in Newcastle who wants to be put into communication with Liverpool is on both exchanges, and therefore there would be no difficulty.

*Chairman.*

1385. There is no trunk wire at present between Liverpool and Newcastle, is there?—No.

Sir *Charles Cameron.*

1386. You have a trunk wire between Liverpool and Manchester?—Many, I believe.

1387. You are rather proud of the service there, I believe?—I think the Liverpool service is as good as any I know; it is much better than the London at any rate.

1388. Have you had any complaints of it?—No; I seldom hear of substantial complaints as to that.

1389. There is an immense amount of business done between Manchester and Liverpool, is there not?—I should think myself that the wires are more than fully occupied during business hours.

1390. You are aware that there was a competing licence in Manchester?—There was the Mutual in Manchester.

1391. And you have told me that you have had no complaints as to Manchester?—No; but if a man was on the National you could not get on to him from the Mutual.

1392. We can theorise about anything, but I want your actual experience; you have had no complaints. Now, as to the effects of competition, you have told us that it would lead to great public inconvenience, that even if the corporation attempted it it would be an expensive thing, and that the expense would fall upon the rates. That I think is your position?—What I think the probable effect of competition by a corporation with the National Telephone Company would be, that the National Telephone Company would, in order to get rid of the competition of the corporation, cut down their charges to such an extent as might force the corporation to work at a loss.

1393. We were told, at the last sitting, of an experiment in competition that has taken place in Dundee; we were told that in 1884 in Dundee there was a telephone company which charged 20*l.* a year for its telephones, that a small local company was formed with a capital, I think, of 5,000*l.* or 6,000*l.* (the total amount of capital subscribed was 3,537*l.*), and that the old company cut down its charges at once from 20*l.* to 5*l.*; we were also told that the competition went on, that the amount of telephonic communication in Dundee became enormous (it was, I think, the second city in the United Kingdom but certainly in Scotland), that this small company with its small capital earned 9 per cent. on its capital, that it was brought up finally at a premium of 40 per cent., and that everybody there was delighted with the competition; would that fact not rather lead you to inquire whether your theories were quite sound?—The case you quote, sir, would not, I think, alter my opinion; that if the Liverpool Corporation attempted to compete with the National Telephone Company in Liverpool, it would end disastrously to the rates.

1394. There is no one asking the Liverpool Corporation to compete with anything or to do anything in the matter; what I am cross-examining you on is the statements that you have made in opposition to the desire of the Corporations of Glasgow, Edinburgh, and Aberdeen (and Dundee probably) to have competition against the National Telephone Company?—I do not object to them either having

Sir *Charles Cameron*—continued.

having the telephones themselves or having competition.

1395. Then this is excellent; we are now coming to accord; you do not object to those corporations that want it having competition, but you do not want to have competition forced upon yourselves?—I do not see how we can object to it if Parliament chooses to allow it. At the same time, I think it would be a mistake on the part of Parliament to allow it, for the reasons I have stated.

1396. That is quite right; but if you object to Parliament allowing it you object to it in the most practical way. I thought we had come down to the point that you did not object to our doing it in Scotland, so long as it was not forced upon you?—What I mean is this: for the English corporations possibly the communication with the Scotch towns is not so important as it is for the communication with towns in England.

1397. You tell us that the communication in Liverpool is very good?—Speaking generally, I think it is good as any in the country.

1398. Do you know Mr. Forbes, who is the chairman of the National Telephone Company?—I know him by name; I am not personally acquainted with him.

1399. You will take it he is the chairman of the National Telephone Company?—I know he is the chairman.

1400. Will you please read out what Mr. Forbes says upon the general subject (*handing a document to the Witness*): Mr. Forbes is there giving evidence before the Parliamentary Committee of 1892?—Mr. Forbes says in answer to Question (366, page 18) "What would you amend that to"? this: "Some reasonable term. We have talked of 10 or 14 years. I should like at once to make an admission."

1401. Now this is what I want you to commence at: "I should like at once to make an admission"?—"I am prepared to concede that the Telephone Company, which conducts about 93 or 94 per cent. of the whole telephone business of the country, conducts a great deal of it monstrously badly; but it is not their fault, it is the fault of Parliament. I should like to follow that by saying that London, Liverpool, and many other large centres cannot be efficiently served without what is called a twin-wire or metallic circuit system."

1402. Thank you, that is what I want; Liverpool cannot be effectively served without a metallic twin-wire system. Now is the system in Liverpool upon the "twin-wire" without which, by the admission of the chairman of the Telephone Company, we were told it could not be efficiently served?—I really could not answer that question. All I can say is, that the telephone system, as a whole, is very fairly good. I have no doubt that by some twin-wire system or some other system it might possibly be improved; and I should be very glad to see it done.

1403. That is quite true; you wish to have a twin-wire system, and you, in the municipal corporations, have sent out the recommendation to the Municipalities not to allow telephone companies to make underground use of their streets?—The corporations do not object absolutely to the wires being laid under their streets; what they object to is the method in which the powers are proposed to be given.

1404. Well, we will see exactly what the association does object to; the opinion of the council is, that "no statutory powers should be conferred on telephone undertakers, unless statutory obligations and limitations are imposed," that is one thing?—That is exactly what I mean.

1405. That is the resolution of the 27th July 1893; but it is the resolution of the 22nd November I want to refer you to. This is the opinion of the Association of Municipal Corporations: "that in the opinion of the Council no powers should be given to any Telephone Company which will enable them to interfere with streets, or with the rights of individuals in property, unless statutory conditions and obligations are at the same time imposed on the company for the protection of the public"?—That is exactly what I have been trying to say, sir.

1406. And in regard to the failure of those statutory limitations being imposed under this agreement you expressly recommend the corporations to refuse to give their consents under the Telegraph Act, 1892, to the exercise by the National Telephone Company of the powers of the Postmaster General under the Telegraph Acts?—For what we considered the very sufficient reasons set out in the report.

1407. Quite so, I am not questioning your report; but that is what it comes to?—Yes.

1408. You recommend the corporations not to give facilities to the Telephone Company that are necessary for the inauguration of a good twin-wire system?—Under the particular Act of 1892.

1409. Exactly; under the particular Act of 1892, you say that competition means expense; you have told us that a corporation could not compete with the Telephone Company in your opinion; on the other hand, we heard a witness tell us the other day that a corporation could at once wipe out the National Telephone Company?—A corporation could compete if it was authorised by Parliament to do it; but I think the result would be as I have stated, a charge on the rates, which I think is an improper thing.

1410. Assuming that the corporation was forbidden to make any charge on the rates, and compelled to provide a sinking fund, and everything of that sort, you think it would be obliged to keep up charges to such an extent as would give the National Telephone Company or any other company a fair chance of working?—A fair chance of competing; in fact, if it was necessary the Telephone Company would lose money in that particular area and make up the loss out of the other areas in order to kill the competition.

1411. That would be greatly to the convenience of the public, would it not?—I do not think it would lead to the convenience of the general public, because it would mean duplicating the already large number of wires overhead, or great interference with the streets.

1412. That I quite understand, but that again

Sir *Charles Camperon*—continued.

is a matter for the local authorities, is it not, and for the central authority. Let us stick to that. Any local inconvenience arising out of duplicating the wires or interference with the streets is a matter which ought to be under the control of the local authority?—Yes, certainly; but may I point out this. I do not think it would be a benefit even if you had a competing body which was prepared to supply at a lower charge than that now being made, for this reason, that if (say) one-fourth of the area of the town was supplied by one company, and three-fourths by the other company, it would mean that everybody would have to subscribe to both undertakings and pay a double subscription; otherwise they never could be sure of being able to telephone to the particular person they wanted to telephone to.

1413. Quite right. Take the case of Dundee, where the original subscription was 20*l.*, and where, owing to competition, it fell to 5*l.* Do not you think, if the man had subscribed two 5*l.* subscriptions, he would have got better value for his money, especially when he had an enormously increased number of people to communicate with, than he got when he had to pay the 20*l.* single subscription?—I should think the case of Dundee was rather an exceptional one, because if you take the case of Liverpool, where the subscription is 10*l.*, I do not see much benefit to be got in paying two five pounds as against one ten pounds.

1414. Suppose he paid two fours?—Of course, if you "suppose" that it would be a benefit; but then, you must show that it can be done.

1415. We are not wishing to force any competition upon you; your corporation has actual control of the whole matter; you can veto competition; but in case a town thought that it could charge 4*l.* instead of 10*l.*, and was willing to do without any powers of rating, do you see any objection in theory to that town getting a licence?—Speaking on behalf of other corporations in England, I do not suppose it matters very much to us if Dundee chooses to have its own telephone system; but if you ask me whether I think it is an advisable thing to do, I must say that I do not. I am merely expressing my opinion, that is all.

1416. You think, no doubt, it would inconvenience Dundee; but if Dundee thinks it knows its own business better than Liverpool, what then?—Let it do it, sir, by all means.

Mr. *John Ellis.*

1417. I have not many questions to ask you after your long examination. I want to take your mind back, in the first place, to the Telegraph Bill of 1892. You let fall the expression that the Associated Corporations did not appear before the Committee. You will remember they drew up some resolutions with regard to that Bill?—Yes, I recollect them.

1418. You recollect this resolution (*handing a document to the Witness*)?—Yes.

1419. Have you referred to those Clauses 5 and 6 in the Bill?—Yes.

1420. Are you aware that as the Bill came before that Committee of 1892, those clauses



Mr. *John Ellis*—continued.

were very different to the shape in which they left the Committee?—Yes; when they came before the Committee the provision that the Corporation should have the absolute veto practically over the exercise of the powers of the Company was not in the Bill; that was put in at the instance of the corporations.

1421. Yes; I am speaking as a Member of that Committee. The suggestions that were made by the associated corporations in their resolutions as to Clauses 5 and 6 were adopted by that Committee, were they not?—Yes.

1422. Therefore, although the corporations did not appear before that Committee, all the suggestions that they made were adopted in the Bill and in the Act?—That is so; if I may say so, on paper; but, practically, our position was this: We objected entirely to the principle of any powers being conferred on the Telephone Company excepting by an Act of Parliament, which, at the same time, settled the restrictions. When the Bill was introduced by the Right Honourable Baronet, a Member of this Committee, on behalf of the Government of the day, if I rightly recollect, it was introduced rather late in the Session, and I do not think the Committee met until nearly the end of April to consider it. The Session was getting on, and things were getting rather pressed. I was representing the corporations at that time on this matter, and I know that in communication with the officials of the Post Office they represented to us the strong desire of the Postmaster General that there should not be any obstruction given to the Bill; and, practically, we said, "Well, we do not like it; at the same time, if you will give us the absolute veto to stop the exercise of those powers we will not offer any further difficulties." That is practically how it came about.

1423. I do not wish to interrupt your explanation or your addendum, but I may take from you what is a fact, namely, that the suggestions of the municipal corporations as they came before that Committee were adopted by the Committee?—Oh, absolutely.

1424. Then in the reasons you have given for the position you take here, you have given us strong evidence against municipalisation. By one honourable Member of the Committee there was some analogy attempted to be drawn between gas and water and telephones: I suppose you would place gas and water on an entirely different footing to telephones?—I think they are entirely different matters. Gas and water are necessaries of life, and ought to be supplied at about the cost price and of the best quality by the local authorities.

1425. They are absolutely necessaries of life, you would say?—Yes; the lighting of the streets is an essential to the security of life and property in any town.

1426. Whereas telephones are only desired by a very limited class and are more or less a luxury?—Yes, and I think you cannot have a very much better illustration of that than the fact that (I should think) in a population of between 800,000 and 900,000 people in the Liverpool area there are only between 6,000 and 7,000 subscribers.

 1427. Whereas

Mr. *John Ellis*—continued.

1427. Whereas every householder consumes gas and water, I suppose?—Every householder; yes.

1428. Or is interested in them?—Yes; and every person who walks the streets is interested in having the streets lighted.

1429. You hold out the danger, in case the telephone service was municipalised, of a charge coming upon the rates, which you consider would be unfair; but I rather gather that your inclination would be in favour of State purchase?—Theoretically, I think, the State ought to purchase the whole thing; but not knowing the details in connection with the administration and the other circumstances which must be present to the minds of the Postmaster General and the Chancellor of the Exchequer, I should not feel justified in expressing an opinion upon the subject in face of the decision they have arrived at.

1430. You are, of course, aware from the answers you have given us of the very unfortunate, if not disastrous, financial results to the country of the State purchase of the telegraphs?—I understand that they are worked at a very great loss. I do not know whether it follows that it was the result of purchasing the telegraphs or whether the loss has been brought about by the alteration in the method of charge since the purchase has been made.

1431. I will not ask you any question upon that; we will get that from another witness if necessary. Do you think then that, whatever be the cause, the State purchase of the telegraphs forms no precedent; on the contrary, rather a warning, if anything, against the purchase of an instrument like the telephone?—I do not think it follows, because the experience that the Government have gained over the dealing with the telegraphs would probably assist them in dealing more satisfactorily with the telephones.

1432. I think I have gathered from you that you would not buy out at cost price, but that you would buy out at what the thing was worth (that is the expression you used). If that be so, might not the same consequence follow, that you would have to give something more in the case of the telephone, as in the case of the telegraphs, which would or which might be disastrous to the State?—What I look at is this: if you acquire a given undertaking at a fair price it is not a bad bargain, but if you pay a high price for a rotten undertaking, of course, it is very bad. If the undertaking is a sound one and it is realising a revenue which, after paying all working expenses, will cover not only the interest on the money you have to borrow, but your sinking fund, and possibly leave a margin beside for the reduction of charge, then I call it a good bargain for the State. I might explain on that point that I have in my mind this: that as the State can borrow money at 2½ per cent., if they have an undertaking handed over to them which shows a net profit, say, of 5 per cent. after paying all working expenses, or something more, they have a clean margin then of 2½ per cent. to provide their sinking fund, and for a reduction of charges or for improving the administration.

1433. I gather that as regards administration, you have already indicated to us that State and municipal administration are more costly than private administration; is that so?—I think, speaking generally, that anything done by a municipality would be done at a less charge by a contractor working for his own profit. Speaking, not specifically, but generally, a public body does not get work done as cheap as a contractor who is allowed to make a profit out of the thing.

Mr. *Tully.*

1434. That is where the contractor would be working in competition, or where competition is invited?—I take it that contractors who are in the same line are practically competitors.

1435. The contractor would not have a monopoly?—No; but where you give a monopoly you only give it subject to such restrictions as prevent the exercise of that monopoly to the detriment of the public, and that is my great point in this matter.

Mr. *John Ellis.*

1436. Do you draw any distinction between the undesirability of a loss on a commercial undertaking (such as this would be) coming upon the rates and upon the taxes?—Yes; I think there is even a distinction to be drawn in that case, because in the case of the telephones, the telephones were originally part (or are rather a part) of the Postmaster General's legal monopoly, and, therefore, part of his duties; but I do not think myself that it is right as a matter of policy for Parliament to allow corporations to go into trading concerns more than they can avoid, and this is not a matter which is of such general public utility as to justify the pledging of the rates for the purpose of carrying it out.

1437. Then it is only the element you have mentioned, that of its being part of the Postmaster's monopoly, which brings it within the proper purview of the State, is it?—Not altogether; it is to a large extent.

1438. I am anxious to get your view upon it?—Of course you ask me whether it is right, as I understand it, sir, for the general taxation of the country to bear the burden of the loss on the telegraphs.

1439. I am asking your opinion?—Personally speaking, I do not think it is. I think everything ought to be made to pay, at any rate, its way; that everything in the nature of a public service should be supplied as nearly as possible at cost price. As a general principle, I think it is wrong in the public service either to make a loss or to make a profit if you can avoid it.

1440. And by "public service" you mean both rating and taxation?—Yes.

1441. Rating on the one hand or taxation on the other?—Yes.

1442. You do not distinguish between local and imperial taxation, or do you distinguish?—Not generally speaking. Of course one can draw a distinction in certain cases.

1443. I mean on this particular point?—On this particular point I think there is no distinction practically. The thing ought not to be worked at a loss in either case.

1444. This is my last question; I gather you do not come before us to complain of any particular defects in the service in the Liverpool area, with

Mr. *John Ellis*—continued.

with which you are immediately connected; but on the other hand you think you have a fairly reasonable service which might be improved by the suggestions you have made?—Yes; I think the service in Liverpool is as good as any in the country, and, perhaps, under the circumstances under which the Telephone Company have to work, it is about (almost) as good as we can expect. What I advocate is, abolishing everything which prevents the company improving the service in every possible way in order to make it as efficient as it is possible, under existing scientific knowledge, to do it.

Mr. *Solicitor General.*

1445. You have not told us yet, I think, what is the service of Liverpool: what is the company working it?—The National Telephone Company.

1446. Has there been any competition at any time in Liverpool?—No.

1447. It has always been worked by the National?—It has always been worked by the National, I think. I will not be sure whether there was not one of the subsidiary companies before the National absorbed it I would rather not answer that question. Perhaps you will ask it of some other witness who knows what it was from the beginning. I am not quite sure whether the Lancashire and Cheshire Company had to do with it.

1448. I am told (you will tell me whether I am rightly instructed) that it used to be called the Lancashire and Cheshire?—Yes; I recollect the change of the name now; but there was only one company at any particular time.

1449. There was only one company; no competition?—No.

1450. Up to what date did the competition continue in Manchester; do you remember that?—I believe theoretically it is continuing now, or was up to quite a recent date; but practically the National bought up all the shares and got the Mutual under their control.

1451. You have been asked a good many questions about this agreement; have you had your attention called to the provisions in this agreement that relate to the transfer of "trunk lines, trunk wires, and works." That is the second clause, I think, of the agreement?—Yes.

1452. You are familiar with that portion of the agreement, I suppose; I only call your attention to it in order to put a question to you as to whether or not you think those provisions will be beneficial to the public?—I think that on the whole the additional facilities for telephonic communication which the Postmaster General proposed to give if this agreement is carried out will undoubtedly be a benefit to the public. I am not saying that we shall get any reduction of charge; I do not think we shall under the agreement; but I think that on the whole it will be a benefit to subscribers.

1453. Then, further, there is the portion of the agreement that relates to the connection of post-offices with exchanges; do not you think that that will also be a convenience to the public?—Yes; it will undoubtedly be a great convenience to telephone your telegrams if proper facilities are made for doing it, without too much

Mr. *Solicitor General*—continued.

of what I call "red tape" restrictions as regards paying for them, and so on.

1454. That would be a matter of detail?—Yes.

1455. But you think those are beneficial provisions also?—Undoubtedly those are too. We are experiencing the benefit of them at the present time. It is a great convenience to deposit a sovereign at a post-office and then telephone your telegrams until the sovereign is exhausted; it saves a great deal of trouble.

1456. You mean that you have known cases in which the provisions of this agreement have been actually tested in practice?—I know that the communication between the telephone and the Post Office has been given in many cases, because I have used it myself in houses at which I have been staying.

1457. You have had practical experience of the benefits arising from it?—Yes. I know that at one house especially that I stay at in the country it is a great convenience to be able to telephone telegrams.

1458. You have told us (and I am not in any way differing from you) that this inter-communication in the telephone system, in your judgment, is more important than local communications?—I think they are more important to trade.

1459. You gave an illustration, which appeared to me to be a very apt one, that is, that within the municipality, a clerk might be sent round from one office to another?—I understood that the intention of the honourable Member who asked me the question was this, to ascertain whether I thought it would be a greater benefit, say, to have a couple of sovereigns taken off your subscription in your local area, or to have not so good a communication with other towns. My contention is that for commercial purposes it is far more important to get this inter-communication with all the towns you are likely to want to communicate with than to save two sovereigns a year in your subscription.

1460. Speaking of the area in which Liverpool is situated, your own area, what would be the effect of granting licences to municipalities as affecting the inter-communication?—It seems to me that if you take Liverpool as a case to illustrate the effect, it would bring the telephone system to an end almost. We have in the Liverpool area the three county boroughs of Liverpool, Bootle, and Birkenhead. Then when you get beyond those areas there are, I think, 10 or 11 different local authorities. Now, the majority, a great number of the people, at any rate, are people who have business in Liverpool.

1461. We have it in the schedule: "The city of Liverpool, the county boroughs of Birkenhead and Bootle, and the urban districts of Walton-on-the-Hill, West Derby, Wallasey, Much Woolton, Childwall, West Kirby and Hoylake, Weston-and-Parkgate, Bromborough, Lower Bebington, Wavertree, and Huyton, with the adjoining area, as defined by a red line on the map"?—Yes. What I would point out in a case like that is this: it is a very general system for a man who has a telephone to his office, for which he pays 10 guineas or 10*l.* a year, to also have a telephone to his house, for which he pays 8*l.* 10*s.* Now, as a rule, I should say that in Liverpool

Mr. *Solicitor General*—continued.

the man never lives in what I may call the same area as that in which his office is. In many cases in the Liverpool area you would have to go through the district of, perhaps, two or three different local authorities before you arrived at the man's house. Now, if you had the telephone of Liverpool in the hands of the corporation up to the extent of the city boundary, and then you came to another telephone in the hands of the Birkenhead Corporation, and then if you had to go all through the local board districts down to West Kirby and Hoylake, I think one can easily see how utterly impracticable it would be to manage the telephone system under such circumstances.

1462. I suppose a great many Liverpool merchants live the other side of the river, in Birkenhead, and other places, do not they?—Not only that, but many of them live out at Walton, at Aigburth, Garston, Huyton, and about there; you have to go through at least two different localities before you arrive at a gentleman's house in those parts. And then, too, it seems to me you would have to pay increased charges, because I do not see that the Liverpool subscriber would be allowed to use the Birkenhead works without paying something for doing so. The thing seems to me impracticable in itself.

*Chairman.*

1463. You express a strong opinion in favour of the areas throughout the country being in the hands of one authority?—Yes.

1464. You probably were not connected officially with the Liverpool Corporation in 1870, but perhaps you are aware that the purchase of the telegraphs by the State was pressed upon the Government at that time in order to secure uniformity of administration throughout the whole country?—I take it from you that it is so, sir.

1465. And you would apply the same principle to the telephone?—Yes.

1466. Whether in the hands of the State, or in the hands of some other authority, the whole conduct of the telephone business within the restricted areas ought to be in the hands of one authority rather than in the hands of different corporations?—Certainly.

Mr. *Moulton.*

1467. On the same basis all over the kingdom?—Not necessarily. What I suggest is, that the Committee should consider whether it could not classify the areas and fix a maximum according to classes. I do not know whether it can be done or not; it is a matter for inquiry.

*Chairman.*

1468. And I suppose you would be of opinion that if the corporations obtained licences, there being different administrations conducting the telephone systems, there might be confusion in the systems which those various corporations might adopt?—Yes. But may I just remark, upon the question of licences, that when the corporations have got their licences they are not, so to speak, more than half-way on the road to becoming telephone undertakers, because they must come to Parliament to get authority to spend the money; and then it seems to me the Committee they go before will inquire into the question whether there is any real necessity for authorising the corporation to spend money where there is a company supplying at something like a reasonable charge. The whole question would turn upon the question of estimates. As far as I can see, the only people who know anything about the telephone system are either in the employment of the Government or of the telephone company. What chance, therefore, has a corporation of getting any evidence which would be really worth bringing before a Committee to show what the effect is going to be.

*Chairman*—continued.

1469. You have expressed an opinion against competition, and in answer to another question you stated that if the Scotch corporations wished to have competition in areas you saw no objection to the experiment being tried; are not you of opinion that competition in the case of the Scotch corporations might possibly lead to serious loss not only to the corporations themselves, but to the company, through the competition which would exist, and that any loss which the company suffered in the competition with the Scotch corporations would have to be made up in the English areas, and that that would mean increased charges to the subscribers in consequence of that loss?—That would follow if the company were not able to pay their maximum (if you did not limit the maximum) dividend.

1470. I am now speaking of what exists under the present system?—Under the present system, of course, if they make a loss in one area they must make it up in some other area. It is for that reason that I think it is wrong to allow preferential charges, which it would practically come to if you allowed the company to reduce their charges for the sake of meeting the competition of the corporations.

1471. Therefore, unless your suggested restrictions are imposed by Parliament you are directly interested, in Liverpool, in competition not being allowed in the Scotch corporations?—We are; but at the same time, in answer to a question of the Right Honourable Baronet on your left, sir, I hardly felt justified in saying that if the Corporation of Dundee wanted to do something we have any right in Liverpool to interfere. I think Parliament ought to see these points for themselves.

1472. Quite so; but if the result would be detrimental to the telephone subscribers in Liverpool you would have that objection to it?—Yes; I think the system would be detrimental to the whole country, because if you once start the idea that one area can isolate itself from the rest of the country I do not see how you can logically refuse to carry it out all through, or wherever it is asked for.

1473. I will only ask you one other question. As a matter of fact, no English corporation, so far as you are aware, has asked for, or desires to have, a telephone licence?—I never heard of one ever asking for it or desiring it.

Mr. *Snape.*

1474. Before you leave the chair, I should like to be quite clear as to how far the opinions you have expressed are the opinions of the association

Mr. *Snape*—continued.

ciation you are here to represent; you have told us that you are opposed to Municipal Corporations having conferred upon them any powers to construct telephones; is that the opinion of the association you represent?—I have never known anybody at any of our meetings, when I have so strongly expressed my opinion upon these questions, get up to suggest (or to hint) that any Corporation should have a licence. That is all I can say.

1475. Then the opinion that you express, that the powers of Corporations should be limited to providing necessities of life, would be scarcely in accordance, for example, with the policy of Parliament to-day with reference to the working of the tramways?—I did not follow the proceedings of the House yesterday; but I understand that the principle of working the tramways is put forward somewhat in this way: that if a Corporation cannot lease their tramways at a fair rent, then they are to be allowed to work them themselves subject to certain restrictions by the Board of Trade.

1476. Precisely; but you would not call it a necessary of life the working of the tramway?—I do not approve at all of the Corporations working tramways. I believe in their owning them, but not in their working them.

1477. If members of your association appealed to their representatives in Parliament to support such a proposal (as I know they did), then it is evident that your association is not unanimous in the view you have expressed to the Committee?—I do not think it follows. We very often, as a matter of courtesy to towns, send round circulars which are sent to us asking Members to take a particular line of action with regard to some particular Bill; but on the question of working the tramways it is necessary that some power should be given to the Corporations to work their tramways in certain events; otherwise they would be "cornered," so to speak, by a syndicate when the lease of the tramway terminated. The exact wording of the conditions, and the exact way in which these powers should be exercised, is, of course, a matter for consideration; but it is necessary to have a power like that.

1478. I only ask as to the unanimity of the view you express; I want to know whether you represent the unanimous view of your association, or only part of it?—I cannot say what the proportion is, either for or against, because it has never been "divided" on the subject.

1479. It is of importance, having regard to the evidence you have given on the subject?—I think I may safely say that, generally speaking, I believe the Municipal Association would endorse the opinions I have advocated.

Mr. *Snape*—continued.

Mr. John Harrison, called in; and Examined.

*Chairman.*

1480. You are Town Clerk of Leeds, I think?—I am, sir. I have held that position, if I may say so, for some three years; but I do not appear here as a representative of the Corporation (from whom I have no mandate), but in pursuance of the resolution which has been quoted to you of the Municipal Corporations Association. The deputy town clerk of Liverpool and myself represent the views of that association upon the points which are set forth in the resolutions which you have before you.

Mr. *Snape.*

1481. The Association of Municipal Corporations?—If you please.

*Chairman.*

1482. Would you, without going over the evidence which has been given by the last witness, who appears with you, state the points which you wish to express on behalf of the association as bearing upon this question?—Speaking generally, I agree with what Mr. Clare has said; but there are some points (possibly not of great importance) upon which I entertain a different view; but I feel that Mr. Clare has given much greater attention to this business than I have, and has been much longer associated with the association, so that possibly he is better able to speak upon the subject than I am.

1483. Perhaps I might ask you: do you generally agree with the view expressed by Mr. Clare with regard to the question of the municipalisation of the telephone?—No, sir.

*Chairman*—continued.

1484. Would you express your view upon that, then?—With regard to that point, I have a sort of descending scale. I should say, in the first place (as he said), that the true view of the Municipal Corporations (the Corporations associated) would be that the best course of all would be for the Government to take over the lines; next to that, that one strong company should do so, having its operations all over the whole country.

1485. Excluding the trunk wires?—Excluding the trunk wires, but particularly insisting upon conditions and obligations as set forth in the resolutions, that being really the condition of the agreement, that one company should operate over the whole country.

Sir *Julian Goldsmid.*

1486. That is what Mr. Clare said?—I have not said otherwise. I quite agree with that view, so far. Then, I do not quite agree with Mr. Clare on this: I do not know that the Municipal Corporations have expressed a view beyond the points which are set forth in the resolutions; but so far as I have been able to judge from my interviews with different representatives of Corporations, I should scarcely agree that the Corporations were not in favour of competition, but the contrary, of competitions in case the one great company should not have the conditions and obligations which I have spoken of imposed upon them; and if there were competition, such persons as I have spoken to would certainly be in favour of Corporations being allowed to join

Sir *Julian Goldsmid*—continued.

the competition if they deemed it necessary themselves to do so.

*Chairman.*

1487. As a matter of fact, no Corporation in England has asked for a license?—I understand that to be the case.

1488. Do you think it would be desirable, or practicable, to establish separate undertakings in different areas; that is to say, undertakings under different authorities?—There unquestionably would be disadvantages in that course; but if that course would secure the advantages which would be derived by the imposition of obligations upon the one company, I should say that the balance of advantage would be in the competition.

1489. And those disadvantages would exist whether the competition was between municipalities and the existing company, or between the existing company and another company?—It would appear to be so.

1490. Then I understand you to say that, in your opinion, competition would be only justifiable in the event, first, of the State not taking the whole matter into its own hands; and, secondly, in the absence of such conditions as would compel the existing company to give a better service than it has given under restrictions and under obligations which might be imposed upon it by Parliament?—Yes; particularly as to charges.

1491. Particularly as to charges. Do you agree with Mr. Clare that it would be advantageous to increase the limit or period of the license of the present company?—I do feel that there is a great deal of force in what Mr. Clare says on that subject; but, to my knowledge, that has not been a point which has been carefully considered, or considered at all, in fact, by the Associated Corporations; it seems to me that a good deal may be said on both sides of that subject.

1492. You would be opposed to any proposal which would put difficulties in the way of the State acquiring the telephone system?—Absolutely.

1493. Have you any strong opinion with regard to the question of breaking up the streets for the purpose of putting twin wires underground?—Yes, a very strong opinion; but it seems to me, if I may say so with great respect, that the provisions of the Act of 1892 (which provisions are imported into the agreement, or the proposed agreement) meet the case.

1494. "The agreement," we call it?—The agreement, if you please.

1495. The existing agreement?—If you please.

1496. You consider that those provisions meet the case?—I do. I understand the position to be that the Corporations have (first) the power to exclude the operations of the company; and (second) that if they agree to any interference with the streets, it may be upon such terms and conditions as the Corporation may require.

1497. Assuming that underground twin wires are necessary for effective service, competition would mean the breaking up of the streets for each of the two systems, the two systems belonging to two competing companies?—That would be so.

*Chairman*—continued.

1498. And that objection would be another serious difficulty in the way of competition from the point of view of the Corporations?—Well, not so serious, sir, having regard to the fact that the Corporation could make its own terms and conditions; that is to say, they would make it a condition of granting consent that they should do the work themselves. I have no very great fear about that. I do not look upon it as a very serious matter.

1499. I believe the association passed a resolution that the Corporations of England should oppose as a body the exercise of the rights to be conferred upon the company by the Postmaster General?—That is so, sir, with a view of the conditions to which they attach so much importance being secured.

1500. And, so far as your Corporation are concerned, they would be prepared to enter into an arrangement similar to that which the Manchester Corporation has entered into upon reasonable conditions being agreed to by the company?—I am not able to say that, sir; but I may say that some time ago the Corporation did make an agreement with the Telephone Company in regard to underground wires as to a very small part of the city, and that negotiations are now pending with regard to their extension, and that probably the serious difficulty will only be in regard to terms.

1501. Did the agreement extend only over a portion of the town?—A small portion.

1502. Did that work successfully?—Yes; I have not heard any complaints; it is an agreement made some five and a-half years ago.

1503. And it works successfully, so far as you are aware?—So far as I am aware, yes.

1504. And you think that something on the basis of that agreement is a reasonable and possible solution of this difficulty with regard to underground wayleaves?—Yes; the whole question, so far as I have been able to gather, will turn upon payments, fees, charges.

1505. What is your telephone charge in Leeds?—£10 for one instrument.

1506. With any reduction for a second telephone?—I suppose so; I think the Corporation pay 8*l.*

1507. As part of the agreement, is that?—Oh, no, not at all; it is quite distinct.

1508. As a public body they pay it?—As a public body, for the large number of telephones which they have; 40 or 50.

1509. What is the area of Leeds, or, perhaps, the population of Leeds and the number of the telephone subscribers in the area will be the better way of putting it?—The area is 21,572 acres, and the population, in round numbers, is 400,000.

Sir *Julian Goldsmid.*

1510. Is that the borough?—That is the whole of the borough, sir; the city.

*Chairman.*

1511. The area granted under the agreement to

*Chairman*—continued.

to the company extends far beyond the area of the borough?—That is so.

1512. It includes the city of Leeds, the municipal borough of Morley, and the urban districts of Drighlington, Tonge, Gildersome, Methley, Ilkley, Otley, Rawdon, and Guiseley, with the adjoining area, as defined by a red line on the map?—That is so.

1513. That extends far beyond the limits of the borough?—Oh, yes.

1514. And includes a number of populous places outside?—Yes, not towns, but populous villages and industrial districts.

1515. And would it not be a serious curtailment of the advantages of the telephone service if the area were restricted to the area of the borough boundaries?—It certainly would in some regards; but there might be greater advantages on the other side.

1516. Such as—what?—Such as securing a better service and a reduction of price. Leeds is differently situated (if I may add this) to Liverpool in some respects, and particularly, as I understand from Mr. Clare's evidence, in regard to service. In Leeds, from statements made to me from time to time, we are greatly dissatisfied with the service in regard to delay in connections, cuttings off whilst speaking, disturbances whilst speaking, and the fact that other people frequently hear the conversations which are taking place besides those who are speaking to each other.

Mr. *Moulton.*

1517. Cross-talk, you mean?—Cross-talk. Then, of course, there is the all-important subject of charges. On the other subject, sir, I understand the great and special cause of the difficulty is the fact that we have single wires only, and that that difficulty would be removed by a return current by return wires.

*Chairman.*

1518. Which it will be possible for the company to supply as soon as they have come to terms with the Corporation for the use of underground way-leaves?—"Possible," yes.

1519. Are you speaking from your personal experience of the telephones in Leeds, or from hearsay evidence?—I am speaking of these difficulties from both; but more particularly from what has been said to me, because I do not use it personally very much.

Sir *Charles Cameron.*

1520. You have just said that you do not use the telephone personally. Why do not you use the telephone personally?—I did not perhaps speak quite specifically; I do use it personally; but usually I only go to it when the person to whom I wish to speak has got to the other end.

1521. Is it because you find it not a very pleasant or easy method of communication?—No; it is rather the commencement of the conversation that I am speaking of, and the delay that frequently takes place before you can get the connection.

1522. What does Leeds pay for the telephone?—£10.

Sir *Charles Cameron*—continued.

1523. What does the Corporation pay, as a rule?—£8.

1524. That is per instrument; and, as a whole, what is it?—I do not know for certain; I think they have about 50 telephones; that would be about 400*l.* a year.

1525. £400 a year?—I should think so; but that is a mere guess.

1526. It is of great importance, of course, to a municipality, especially like that of Leeds, which is scattered over such a wide area, to have perfect telephonic communication with its different offices, police offices, water offices, gas arrangements, and officials all over the town?—Certainly.

1527. Do you agree with Mr. Clare as to the comparatively minor importance of the extra-mural telephony?—No; that is one of the points of difference. There may be quite a different state of things as affecting Liverpool to that which obtains at Leeds.

1528. But, as a matter of fact, in Leeds, I suppose, there are very many hundreds of messages sent between people within the town for everyone that goes to a distant town?—Yes; if I may say so, I attribute very great importance to the trunk wires, but even more to the wires within our own exchange area.

1529. I think everyone attributes great importance to the trunk wires; but, as a matter of fact, the introduction of long-distance telephony will be brought about under the operations which are being undertaken by the Postmaster General, and will be quite new, will it not?—That, I understand, if I may be privileged to say so, is one of the advantages of the agreement.

1530. But the system that will be inaugurated under the agreement will be a new public convenience; at present the great mass of telephony in Leeds, I suppose, is within your own municipality?—Yes; but, of course, there is a good deal of outside communication; it would not be new, it would be improved.

1531. When you said you were in favour of competition, did you speak for Leeds or for yourself?—Myself; I have no authority to speak for anyone but myself.

1532. And do you think that the views of the Association of Municipal Corporations as a body are against competition?—The subject has never been considered, sir. Mr. Clare has told you that the gentlemen with whom he has spoken would be, so far as he could judge, against competition; on the other hand, the gentlemen with whom I have spoken would rather be in favour of competition, provided the conditions and obligations that I have spoken of were not imposed upon the National Telephone Company.

1533. Therefore, as a matter of fact, the association, as an association, has never given expression to any view upon the subject?—That is admitted; but Mr. Clare is a greater authority than I am.

1534. That is your modesty, possibly. Do you see now, from a Leeds point of view, any objection to granting to those corporations that desire to have it a licence, or to allowing competition where the municipalities care to support competition?—I should very much prefer conditions

Sir *Charles Cameron*—continued.

ditions being imposed upon one company so that we should have a good service by one company at reduced rates; but if that could not be so, I do not see any objection to the competition.

1535. As a matter of fact, I suppose you have read the agreement, and know that the one point of leverage which the agreement presents to the Postmaster General for insisting upon a good service is the power you refer to which grants competition?—Yes.

Mr. *Tully.*

1536. Are you a member of the same association as Mr. Clare?—Yes, but not so old a member, and I do not take so active a part in the discussions as he does.

1537. I suppose Mr. Clare told the corporations that Parliament could make all the reforms needed without their having to resort to the necessity of competition; that is, if they did not care for the risk and worry of competition?—I scarcely understand your question, sir.

1538. When Mr. Clare said the disadvantages caused by the present system could be remedied by the action of Parliament, the corporations then did not care to embark on the risk and worry of competition with the existing company?—I think that is the view of the corporations, apart from the expression of Mr. Clare.

1539. Mr. Clare did not tell them that Parliament is very slow in acting, and that competition is the remedy to their hands?—No, we had some general knowledge on that subject.

1540. If the corporation had a license to act, and the company had a license, would you think that the company should have the same powers to tear up the streets as the corporation has?—No; I think that the corporation should be supreme in the matter of the tearing up of the streets.

1541. So that if there were competition the corporation would have this advantage: that they would have the control of the streets, whereas the company would not?—That would be so.

Mr. *Moulton.*

1542. You think it of great importance that there should be a reasonable, a cheap, and an effective service of telephones?—I do.

1543. Now taking the existing state of things, that is, the existing agreements, you may take it from me that there is no power to secure either a cheap or an effective service in the agreements with the telephone companies excepting the power of granting competing licenses?—So I understand.

1544. Now if in any town the telephone companies failed to grant a cheap and effective service, in your opinion, ought that power to be exercised; that is to say, ought the power to grant competition to be exercised?—Yes; but allow me to explain.

1545. Perhaps my next question will put it right. If you are going to bring in a competition, in your opinion, is there any competition so good in the interests of the public as giving a license to the municipality?—No.

1546. Therefore do you think it would be a fair settlement to say that in the cases in which

Mr. *Moulton*—continued.

telephone companies failed to give a cheap and effective service in any town, the municipality should have a license if it chose?—If it chose, yes, but not an obligation.

1547. No; but it should if it chose?—I should be very strongly opposed to its being imperative upon a corporation to work the telephone.

1548. But you think it should have the power if it chose to do it?—If there should be competition (which would be a regrettable thing) then I do not see why the corporation should not be at liberty to enter the competition.

1549. And the question whether there should or should not be such a privilege given to the corporation you would decide by the consideration of whether the telephone companies had or had not given a cheap and effective service?—Largely so.

1550. Now you consider that the protection to the municipalities in regard to breaking up the streets contained in the Act of 1892 is sufficient?—In regard to companies, yes.

1551. Would you just look at Section 12, page 19, of the agreement; have you got the agreement before you?—Yes, I have it, "underground connection of exchanges," that is what I had in my mind.

1552. The protection in the Act of 1892 is this: The company shall not exercise the powers given to the Postmaster General by the Acts of 1863 and 1878, without the consent of the municipalities, that is the protection, is it not?—Yes.

1553. Now just look at Section 12 of the agreement. So far as joining exchanges is concerned they get out of that protection by asking the Postmaster General to do it, do they not?—Yes, practically it would seem to me as if the Postmaster General would be the agent of the companies for these specific purposes.

1554. But that repeals the protection so far as underground wires are concerned joining exchange?—So I should understand.

1555. And those are the most important part of the underground wires?—That is so.

1556. So that (I do not know what you think) do you think that the municipalities ought to have some protection with regard to that?—Yes, certainly I do; but I understand it in this way (I do not know whether I understand it correctly), that the Postmaster General must act with the consent of the corporation, subject to his right of appeal; so that there might be an obligation upon the corporation which would be entirely discord, or which would not be at all in accord with, their views of the proprieties of the case.

1557. You think that the power of veto in the corporation with regard to underground wires should not be taken away by such a clause as Clause 12?—Yes, sir; I naturally believe that the corporations should have complete control against everybody in regard to their own streets.

*Chairman.*

1558. Against the Postmaster General as well as anybody else?—I should like to see it with regard to everybody, with great respect: I should

*Chairman*—continued.

should like to add, seriously, that I quite recognise a difference between the position of the Postmaster General acting on behalf of the whole country and that of other people who are merely trading for profit.

Mr. *Snape.*

1559. By the "strong company" to which you referred, do you mean a company to which larger powers and of longer duration than those which the National Telephone Company at present possess should be given?—Yes, I do not regard those matters as of very great importance. The "strong company" I referred to was a company exercising powers all over the country, "strong" in the sense of its being broad and large.

1560. Would not the existence of such powers, then, be a distinct interference with the rights of the State; certainly an added difficulty in the way of the State taking over the telephone service?—I should say not to a very large extent.

1561. If the different authorities controlled different exchanges, is it probable that they would refuse to make reciprocal inter-exchange arrangements with the neighbouring districts?—No, sir; I should imagine that a fair arrangement might be made; but, of course, in proportion as you increase the number of the powers that be, you increase the difficulties of the situation.

Sir *James Fergusson.*

1562. I do not think you have said much about the particular case of Leeds: Has the municipality of Leeds pronounced upon its own wishes in respect to the telephone?—No, sir, not at all, except to associate itself with the known and declared policy of the association of municipal corporations.

1563. Do you know whether the municipality of Leeds has considered the arrangement that was made between the City of Manchester and the company?—As a corporation, no.

1564. You could not say whether you think the City of Leeds would be favourable to such an arrangement as Manchester has made with the company?—I am not able to say definitely. We are considering certain matters with the Telephone Company at the present time, and the arrangement with Manchester will, no doubt, be taken into account before coming to a final decision.

1565. I hardly think, in your answers to the honourable and learned Member who was questioning you just now, you went all the way with him?—I do not know about his position, sir. I endeavoured to answer his questions very frankly.

1566. You accepted his questions with certain qualifications; in fact, as I understood you, you favoured the assumption of the charge of the telephones by municipalities rather in cases of necessity than by preference?—Yes; I have a descending scale, and I certainly only put the municipalities in to have this power on the conclusion that the one company alone should have imposed upon it the obligations I have suggested.

Mr. *Moulton.*

1567. Where that company failed to give the cheap and effective supply, then you thought the municipality ought to have the power?—That is so. Those are the conditions that I am referring to now.

Sir *James Fergusson.*

1568. Yes, that is quite right; you are acquainted with the terms of the Manchester settlement, are you?—No; I should hardly say that.

1569. As I am one of the Members for Manchester, perhaps you may take it from me?—Certainly, sir.

1570. I understand the principal terms are these, that the company agrees to lay twin wires as far as possible in tubes provided by the corporation, the subscription not to be increased without the consent of the corporation; every citizen to be entitled to the supply on payment of the subscription, and no monopoly to be conferred thereby. If some such arrangement as that could be made by every municipality, you would think that preferable to the municipality assuming the charge of the telephones themselves, would you not?—I should want to go a little further than that.

1571. You would want a little more than this?—Yes.

1572. What more would you wish?—I should specially want an arrangement with regard to maximum charges.

1573. Perhaps I forgot to say that the subscription was not to be increased without the consent of the corporation; did not I say that?—Yes, sir, you did say that; but I think, if I sufficiently understand the views of the people of Leeds, they would desire not only not an increase, but a reduction, and a large one.

1574. Provided a charge could be fixed that was considered fair, you would think such an arrangement as that preferable to the corporation assuming the charge of the telephone system themselves?—Yes, subject to the service being effective.

*Chairman.*

1575. You were asked by a Member of the Committee just now whether you thought it would be right that where the company failed to give an effective service then the corporation should be entitled to ask for and obtain a license?—Yes.

1576. If the failure to provide an effective service was due to the refusal of the corporation to allow underground wayleave powers to the company, do you think it would then be reasonable for them to come and ask for a license?—If the corporation played the part of the dog in the manger, I should think they could not be entitled to much consideration at the hands of the Postmaster General.

1577. That is to say, you think the corporations generally, before asking for a license, should give all the reasonable facilities to the company, which you in Leeds are proposing to give, and which the corporation in Manchester has already given, reasonable facilities for having the twin-wire system underground?—Yes, certainly. If I say that certain conditions and obligations should be imposed upon the company as a con-

*Chairman*—continued.

dition of their having no opposition, I should quite consider that it was an obligation of the corporation to afford all the facilities in their power so that those conditions might be complied with.

Mr. *Snape.*

1578. One of those conditions would be a reduction of charge, I understand?—Certainly.

*Chairman.*

1579. Apart from these obligations and restrictions, which could only be imposed by Act of Parliament, you still think that the corporation, before coming to the Postmaster General for a licence, ought to give all reasonable facilities to the company to give an effective service by either allowing them to put their wires underground or by offering to put the wires underground for them at their expense?—Yes, but that would only be one part of the case.

1580. That would only be one part of the case. Then with regard to the municipal licence, do not you consider that it would be a great disadvantage if the area of the licence was confined to the area of the borough, and was to exclude all the outside area in which the inhabitants lived?—Yes, sir; that is one of the disadvantages, clearly.

Mr. *Snape.*

1581. But you said, did you not, that it would be possible to have a reciprocal arrangement between the districts?—It would be possible, but I admit there are certain disadvantages; there are also certain advantages. My belief on the subject (a very humble expression of opinion, which is not worth much) is that, on the whole, the advantages outweigh the disadvantages.

*Chairman.*

1582. You were asked whether the underground wayleaves for the wires joining the exchanges were not the most important of all the underground wayleaves which might be acquired. You are aware, of course, that the wires joining the exchanges only apply to particular lines of streets joining two or three or more exchanges, according to the number in the particular area; and that the underground wayleaves for the other wires, the wires joining the exchanges to subscribers' houses, radiate in every direction?—That is so.

1583. And those, therefore, would be by far the most numerous cases, of course, of disturbance to the streets?—Yes, I think that is the case; it is entirely a question of degree.

1584. And, of course, you are aware that the granting of the licence to the corporation of itself

*Chairman*—continued.

would not enable the corporation to carry on the telephone business; they would still have to come before Parliament?—I understand that some doubt has been expressed upon that position, sir; if I may say so, my own view is that they would have to come to Parliament.

1585. They would have to come to Parliament, and the Bill would have to go before a Committee?—That is so.

1586. Where, of course, the company would have the right to oppose the proposals of the corporation; it is not merely the granting of the licence by the Postmaster General which would be necessary before the corporation could exercise their rights?—It would be impossible for a corporation to come to Parliament for anything which uses electricity in the least degree without having the opposition of the Telephone Company to meet.

Sir *James Fergusson.*

1587. Has not there been some difficulty in Leeds in respect to the telephones on account of the electric machinery in use there?—The electric tramways; yes, sir.

1588. That, in fact, was the earth connection difficulty, was it not?—Yes, the whole difficulty, as I have understood it, arose in consequence of the wires being single and not twin wires.

Sir *Charles Cameron.*

1589. In reply to the Postmaster General, I understood you to admit that you thought it would be reasonable that the corporation should grant every facility, such as has been given in Manchester to the company, before demanding a licence which would enable them to enter into competition. Now, I want you to tell us exactly what was your remit, and what were your instructions, as a delegate, from the Association of Municipal Corporations?—I have no instructions whatever.

1590. The resolution was to this effect, was it not: "That the corporation be recommended to refuse to give their consents under the Telegraph Act, 1892, to the exercise by the National Telephone Company of the powers of the Postmaster General under the Telegraph Acts"?—Yes.

1591. I am not at all challenging your opinion, for which I have every respect as an individual opinion; but should I be clear in assuming that the idea of the association was that it is better for the corporations to hold the power until they see themselves properly served, and that it is not good policy to lock the stable door after the horse has been stolen?—That is so.

## Mr. Willoughby Hyett Dickinson, called in; and Examined.

*Chairman.*

1592. I think you are Deputy Chairman of the London Council?—Yes.

1593. And you wish to state the opinion of the Council, or of a portion of the Council, with regard to the question of the telephone service in London, do you not?—Yes, sir. May I just,

*Chairman*—continued.

quite shortly, say what the Council has done in this matter?

1594. I think so?—It is some time ago since the attention of the Council was first called to this question. In 1892 the National Telephone Company brought in a Bill, which, I suppose, originated

*Chairman*—continued.

originated from the fact that it had been decided in a court of law that they were not a telegraph company entitled to exercise the powers which had been given to telegraph companies. That Private Bill proposed to give to the National Telephone Company those powers. The Bill was petitioned against by a large number of local authorities including the London County Council, and, as the Committee are aware, the Bill was not proceeded with; it was held over until 1893, and then it dropped because the Telegraph Bill of 1892 had passed. Then, during that summer, the matter came up on the Treasury Minute of the 23rd May, and the Telegraphs Bill (which was introduced in June) was read a second time on the 3rd June 1892, reported on the 16th June, and obtained the Royal Assent on the 28th June. That Bill the Council did its utmost to stop. Sir John Lubbock, on behalf of the Council, protested in the House of Commons, and Lord Hobhouse, on behalf of the Council, protested in the House of Lords; but it passed through with great rapidity and the Council's protest was of no avail at the time. We always understood at that time that competition would still exist between the companies. Then the Council was able to do no more for some time. The heads of agreement were signed on the 11th August 1892, and the then Government went out of power almost immediately afterwards.

1595. These facts are all before the Committee; therefore I think you must confine your evidence to the action of the County Council at this particular stage, and in no sense raise questions affecting either the policy or the validity of the agreement between the Post Office and the National Telephone Company?—I am attempting to follow you; I was attempting to do so then; I meant to explain what the Council had to go on at that time. Nothing had happened then; therefore the Council did nothing until 1893. In 1893 a resolution was passed by the Council: "That it be referred to the Highways Committee."

1596. Anything which affects the policy or the validity of the agreement up to the time of its becoming an active agreement (which it now is) cannot be considered by the Committee. Assuming the agreement to be a valid and subsisting agreement the Committee are prepared to hear recommendations with regard to the development or the improvement of the telephone system in the future?—I was only anxious to show that the Council was able to do nothing until last October, because it had not got the agreements before it. The Council asked the Postmaster General to allow it to send a deputation. You, sir, consented to receive the deputation after the agreements had been laid on the table; therefore the Council was unable to do anything until October of last year; then they had the agreements before them. Then the Committee that had this matter referred to them asked you to receive a deputation, and the deputation was received on the 4th February of this year. The shorthand notes of everything that took place at that deputation were sent to each member of the Council, and on the 12th February the Council had a report



*Chairman*—continued.

before it from the Committee with regard to this deputation. If I may just read a short portion of it I will do so. The Committee stated that: "Proceeding upon this reference we looked very carefully into the provisions of the agreement; and we soon came to the conclusion that if the agreement were carried out the interests of the people of London in the matter of telephone service would be to a great degree prejudiced by the power given under the agreement to the National Telephone Company, whose existing monopoly would be further strengthened. Moreover we did not find in the agreement any provision or arrangement for reduction of charges, a matter of grave importance to the business people of London. We therefore come to the conclusion that one of three courses should be taken, namely, (a) that severe restrictions should be placed upon the company, (b) that the State should take over the company's business; or (c) that the municipality, *i.e.* in London the Council, should do so"; and the recommendation was: "That the London Members of Parliament be requested to ask for the appointment of a Select Committee of the House of Commons to make full inquiry into the proposed agreement between the Postmaster General and the National Telephone Company, and the relation of such agreement to the powers and duties of municipal authorities in London and elsewhere. An amendment was moved to that to leave out the words relating to the relationship to the municipal authorities. That amendment was lost without a division. Then the matter was left to the Committee to proceed with its inquiries in reference to this Committee sitting, and after the election they brought up a further Report on the 26th March 1895, in which they said: "We reported on the 12th February last that after careful examination of the proposed agreement between the Post Office authorities and the National Telephone Company, we were of opinion that the interests of the people of London would be, to a great degree, prejudiced by the power to be given under the agreement to the company, whose existing monopoly would be further strengthened." Then they recommend, and the report proceeds: "We have therefore asked the deputy-chairman and the engineer to give evidence. We think it advisable that one or more of the experts who advised us previously to the interview between the Postmaster General and a deputation from the Council on 4th February last, should also give evidence before the Select Committee on behalf of the Council; and we recommend: That the Highways Committee be authorised to take all necessary steps for properly placing the Council's views before the Select Committee of the House of Commons on the Telephone Service; and that, subject to an estimate being submitted to the Council by the Finance Committee as required by the Statute, the Council do authorise the expenditure of a sum not exceeding 100*l.* in connection with the matter." That gave rise to a lengthy debate on that day, and an amendment was moved on the motion to adopt the recommendation of the committee: "Amendment moved by Sir J. B. Maple, seconded by Mr. Beresford Hope, that the recommendation

*Chairman*—continued.

be referred back to the committee. Amendment put to the vote, and, the Council having divided, there appeared: For the amendment, 42; against the amendment, 74." Therefore, under that order of the Council I appear on behalf of the Council. Now, the committee, ever since October last, has been giving their attention to the agreement; and, shortly stated, their opinion was that the operation of the agreements would very greatly strengthen the position of the Telephone Company; it would give it a practical monopoly over the whole kingdom, and give it advantages which the Post Office

*Chairman*—continued.

possess (rightly) at the present moment, but which we thought no private company ought to possess. I daresay I need not go into the question of the facilities that the agreements give to the companies with regard to the sending of messages, assistance given as to the sending telegrams and express messages and the institution of call rooms at post offices, and so forth, all of which, in our opinion, would really be placing the Telephone Company in the position of a partner in the Post Office, enjoying the monopoly of the Post Office to a great extent.

*Friday, 26th April* 1895.

MEMBERS PRESENT:

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| Captain Bagot. | Mr. Grant Lawson. |
| Sir Charles Cameron. | Mr. Arnold Morley. |
| Mr. John Ellis. | Mr. Snape. |
| Sir James Fergusson. | Mr. Solicitor General. |
| Sir Julian Goldsmid. | Lord Stanley. |

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Mr. WILLOUGHBY HYETT DICKINSON, re-called; and further Examined.

*Chairman.*

1597. YOU were stating the evidence on behalf of the London County Council; perhaps you will continue the statement you were making?—I think, Sir, I had arrived at the point where the Council took into consideration these agreements and referred them to the Highways Committee, the committee that deals with electric lighting and that kind of thing for London. They came to the conclusion that the effect of the agreements would be very materially to strengthen the position of the Telephone Company, in the first place, because they contemplated giving them practically similar facilities to those which the Post Office have at the present moment, giving them the opportunity of using the post offices as call-houses, the facilities of sending messages by express messengers and by letter and by telegram, and in all those ways which the Committee are aware of. Then, further, they contemplated handing over the powers of taking their wires along the public roads in the same way that the Post Office has those powers; and also they contemplated giving facilities to the Telephone Company to connect their exchanges by means of any subways which the Post Office should have, or should make for their use.

1598. I think you may take it that the Committee are fully alive to the changes introduced by the agreement, which is now an existing agreement, therefore it is hardly necessary to detail them; we have naturally the agreement before us, and are fully alive to the effect of it?—Yes, Sir, I quite appreciate that; I was taking it just shortly in order to get it in order. Of course in reference to that (taking the wires along the subways of the Post Office) we apprehend there is no veto whatever in the County Council; that that is a matter entirely between the Post Office and the Telephone Company; so that in that respect it is brought outside the provisions of the agreement which require the veto of the County Council. I only mention that because that is our reading of it.

*Chairman*—continued.

1599. I do not quite understand what you mean by taking the wires along the subways of the Post Office; there is no such power in the agreement as far as I am aware?—The Post Office under this agreement contemplated giving accommodation for the connection of exchanges, if I understand it.

1600. Yes; connecting exchanges?—That will be done by the Post Office at the instigation of the Telephone Company, entirely without any reference to the County Council. I mean the County Council has got its veto as regards placing the wires across and along roads and so forth; but this facility is a facility which no one but the Post Office could prevent. I thought a good deal was said about the veto of the County Council; that nothing under this agreement could be effected for the convenience of the Telephone Company unless it was approved of by the County Council under the Act.

1601. That is so with regard to exchange wires; that is quite true. You were speaking generally of the wires; it is confined to the exchange wires; the junction wires?—Yes, it is confined to those. Then the effect of the agreement would be, as far as we could learn, to materially increase the charges which would be made for conveying messages along trunk wires. I will just give you a few instances that we have got out from that agreement. Towns at distances varying from 20 to 25 miles will, under the agreement, pay 6*d.* per trunk message instead of 3*d.* as at present; towns between 40 and 50 miles will pay 1*s.* instead of 6*d.*; towns between 50 and 75 miles will pay 1*s.* instead of 9*d.*; towns between 80 and 100 miles will pay 1*s.* 6*d.* instead of 1*s.*; and towns between 120 and 125 miles will pay 2*s.* instead of 1*s.* 6*d.* As an example, a message sent from London to Eastbourne would under the present tariff pay 9*d.*; under the new arrangement it will be charged 1*s.* The same thing would occur with regard to Northampton.

1602. You are speaking of a conversation?—Yes;

*Chairman*—continued.

Yes; the trunk charges at the present moment; the system which enables persons to send telephone messages from London to various towns all over kingdom. The general tendency of the charges contemplated by this agreement is to increase those trunk charges within a distance of 200 miles, and I was giving actual instances which appeared from a comparison of this agreement with the actual tariff of charges. A person telephoning to Coventry from London now pays 1*s.*; under the new arrangement he will have to pay 1*s.* 6*d.*; and the same change will take place in messages from London to Leicester. A message from London to Nottingham, or to Wolverhampton, now costs 1*s.* 6*d.*; under the agreement it would cost 2*s.*; so that in respect of all the towns within 200 miles of London the charges under the agreement will either be as great as they are now, or else they will increase. Over 200 miles the charges are diminished, but we are more concerned with the towns within the 200 miles. Then there is also a provision in the agreement to which we feel that objection could reasonably be taken, namely, that in Clause 8, with regard to terminal charges. That clause practically contemplates that when a message is sent from the National Telephone Company's office, say, in London, to a telephone office of another company in another town, then it shall be possible for a terminal charge to be made for delivering the message in the other town. That applies in all cases, except the case in which the National Telephone Company is sending a message to a town where itself (the same company) receives the message; and so it seemed to us that the result of that clause would practically be to very much handicap any other company but the National Telephone Company. The very fact that in the case of a message sent from London to a town where it is received by the National Telephone Company, and delivered by the National Telephone Company there would be no terminal charge made, whereas in the case of a message sent by a competing body, supposing there was a competing authority in London, to that same town, there would be a terminal charge made with respect to that message, seemed to us to very materially affect the position of any companies or authorities which would be carrying on a telephone system anywhere else in England or in London, and that was a clause which the Council felt it ought to object to, and did object to, before you, Sir, when it came as a deputation.

1603. I am afraid I must again point out that these are objections to the agreement which is an existing agreement, and which the Committee is not inquiring into. If you have remedies to offer we shall be glad to hear them?—The only remedy, Sir, is that which has been suggested, namely, that competition should be put on an equal footing. I thought I might deal with the effect of the agreements.

1604. You are leading up, are you, to some substantive propositions in order to meet these objections which you are raising?—Yes, certainly. I was trying to show what the effect of the agreement is to my mind. The effect of the agreement in this particular instance is to give a

*Chairman*—continued.

certain "pull" to the Telephone Company over any other company that might be started, or over any other authority that might be carrying on the business unless that same advantage is given to the competing company.

1605. I think you may take it (of course I have no authority to speak as to the possible decision of the Government or of Parliament in a matter of that kind), that if licenses are given to other companies, the same facilities would be given to those companies as to the National Telephone Company?—I am very glad to hear that. That was a question which I addressed to you, Sir, you will remember, at the deputation, and it did not receive that answer. Of course with that assurance the position is materially changed. If that were not so, our view was that the agreements themselves would render competition impossible. That is what I wanted to point out.

1606. As I say, I have no authority to make any announcement on a subject of that sort, but I think you may take it that there would be equal treatment meted out to any companies who were licensed?—Then, to turn to the telephone system in London; as far as we have been able to learn the telephone system in London is certainly not good. The chairman of the company himself admitted that it was very bad at one time, and although I have no doubt, in certain instances, it is improved (the actual service) it is by no means a good service, and complaints are made very generally about it. We had a letter from the vestry clerk of Battersea the other day, stating the complaints that they found they had to make with regard to it.

1607. Will you mention what the complaint was that the vestry clerk of Battersea made?—He sent me a list of the times at which the service was wanting. I will hand you this document with pleasure if you like.

1608. I do not think it worth while reading all that document if you will just let me see it?—No. I will let you see it with pleasure (*handing in the document letter*). I daresay he would like to give evidence himself upon the subject. At any rate, the telephone service is not taken up in London to anything like the same extent that it is taken up in other parts of the world. We have had a good deal of information got together about the telephone system in other parts of the world, and I will just give you a very few figures to exemplify that. In London there is about 1 subscriber to 540 population; in Edinburgh there is 1 to 240; in Amsterdam there is 1 to 237; in Rotterdam there is 1 to 214; in Brussels there is 1 to 192; in Paris 1 to 187; in Rome 1 to 180; in Vienna 1 to 177; in Dresden 1 in 84; in Copenhagen 1 in 83; in Berlin 1 in 66; in Christiania 1 in 36; in Zurich 1 in 33; in Stockholm 1 in 22. So that whereas in Stockholm there is one subscriber to every 22 of the population, in London there is only one to every 540. London stands well ahead of all the principal towns in Europe in deficiency of telephonic accommodation.

1609. Do you think that is at all due to the fact that London has a far better telegraph and a far better postal service than any other town?—No,

*Chairman*—continued.

—No, I think it is due to the two facts I have mentioned; one that the telephone service in London is not good, and the other that it is so excessively expensive. That is one of the reasons which I can come to in a moment. The charges in London are, as the Committee are aware, 20*l.* per subscriber, or 17*l.* 10*s.* on a five years' agreement. We have had information got out, of what the charges are in other parts of Europe, and the evidence that will be given by Mr. Bennett, who has made this a special study, will save my going in very great detail into this matter, but I will give you just a few instances which tend at any rate to show to us that the charges in London are unnecessarily high. The charge in Paris is 16*l.*; the charge in Berlin is 7*l.* 10*s.*; the charges in Belgium vary between 5*l.* and 10*l.*; the charge in Gothenberg is 5*l.* 11*s.* 1*d.*; in Stockholm it is 4*l.* 8*s.* 11*d.*; in Copenhagen it is 8*l.* 6*s.* 8*d.*; in the Dutch towns it varies, but it is about 2*l.* 17*s.* 10*d.*; and in Switzerland there is a different system, but it works out at something under 4*l.* a year. Then, as the Committee are aware, in Manchester there was a competing company started, and that supplied telephonic accommodation at 5*l.* 7*s.*; and in Canada the charge varies, but it is about 4*l.* a year.

1610. I understand that Mr. Bennett is prepared with figures of this kind; but we have already these figures on the minutes, most of them?—I was not aware of it.

1611. I do not know that we have them in every case, but if Mr. Bennett is coming specially with reference to matters of this sort, had not we better leave these figures?—Yes, that is what I was going to say. I felt bound to give the figures which the Committee had got out independently of Mr. Bennett. Mr. Bennett goes in a great deal more detail into the subject, and gives most useful information; but these figures are those which led the Committee of the Council to conclude that the service in London was unnecessarily expensive.

Sir *Julian Goldsmid.*

1612. Did you compare the price of London with the price of New York?—We understand that in American towns, the telephones are very much more expensive; I believe they amount to 30*l.* in New York, I am not sure. In Chicago, and several of these American towns, there are very high prices indeed. But that, if I might submit, hardly affects the question of for how little it can be done. Then, in order to ascertain for how little it could be done, the Committee obtained reports first of all from its officer, then from a telephone engineer, Mr. Newland, and afterwards Mr. Bennett gave also an estimate. These gentlemen will hand in those estimates to the Committee, and will be prepared to be cross-examined upon them, if necessary; but I think it is quite sufficient, if I may say so, if I simply state the results of those reports.

*Chairman.*

1613. I think the Committee have come to the conclusion that with regard to the London County Council, as with regard to other bodies, they must confine the evidence to two witnesses; so perhaps you will take care as to that?—Yes, I am quite prepared to do that if I may just state the result of these reports to you. The result of the report of our own engineer was that you could supply a service to 10,000 subscribers in London at a capital expenditure of something under 400,000*l.*, which would necessitate an annual charge, including redemption of capital, of about 90,000*l.* (these are outside figures) which would be covered by an annual charge of 10*l.* a year. Mr. Newland's report was a capital expenditure of 350,000*l.*, requiring an annual charge of 75,898*l.*, which as you see would work out at less than 10*l.* a year for the 10,000 subscribers. And Mr. Bennett gave an annual charge including redemption and renewal depreciation and royalties of 76,793*l.*, which is about the same as Mr. Newland's, and would require a subscription of 8*l.* or 9*l.* a year. Those three reports, I may say, were got out quite independently of each other, and to our mind they corroborate each other in a remarkable way, showing that London could be telephoned now by a new system with 10,000 subscribers, and that a subscription of something under 10*l.* a year would be sufficient.

Sir *Julian Goldsmid.*

1614. Is that going over houses?—That includes everything, I believe. Our instructions were that those engineers should take everything into consideration and make it, not an estimate they thought it would amount to, but an estimate which could not be exceeded.

*Chairman.*

1615. What area was that to cover?—That was to cover the area of, I think, the County of London, not the outside part.

1616. That is to say a very much smaller area than the National Company now supply within their London district?—Oh, yes, at least within what is to be called the London district in the agreement.

1617. What is called the London district under the agreement?—That includes Kingston and all that.

1618. The 630 or 640 square miles?—Yes.

1619. Your jurisdiction does not extend quite so far as that?—No, it does not, I forget the exact number of square miles ours is, but it is not more than about a fifth or sixth of that. I may mention that as far as our investigations went the actual amount of telephone service in London is far in excess of anything outside. The Telephone Company could give you that. A very small fraction of the London work is done outside the County of London.

1620. Could you tell me whether those estimates took into account the 10 per cent. royalty to the Post Office?—Yes, they did. Having arrived at that point, that we thought London ought to be capable of being telephoned for a subscription of 10*l.* a year, we went into the question of how it is that it is not telephoned at so small a sum.

1621. I suppose you are aware that a large portion of London is telephoned for 10*l.* a year now; that is to say, private houses on a five years agreement get their telephone for 10*l.* a year?

*Chairman*— continued.

year ?— Of course, I am not so well up in this as the Telephone Company would be, but I was under the impression that that was only when the subscriber had an office as well.

1622. No, I think not ; we shall get that from the company ?—Yes.

1623. But, I believe, that is not so ?—Then the Committee investigated the accounts of the Telephone Company as far as they were able to obtain them, and they came to the conclusion that the reason, to a great extent, why those charges are so high is the very large capital of the company. On the 31st December 1894 it was 4,419,155*l.*, and we notice that the proportion of the gross revenue rentals of the company has very much changed of late years. Taking the National Telephone Company in 1889 the capital was 854,000*l.* approximately. At that time the gross rentals amounted to 40 per cent. of the capital, 40 per cent. of the capital expenditure, I should say, to be accurate. In 1893 the gross rentals were only 15 per cent. of the capital expenditure. The Committee are aware that the National Telephone Company and the United Telephone Company were united in 1889; and the same thing is noticeable with regard to the United Company. In the United Company in 1887 the rentals were 44 per cent. of the capital expenditure in London, and as the Committee, I have no doubt, are aware, the United Telephone Company was a Company formed for London, and only for London, and although they extended beyond London in later years, their London accounts were kept sufficiently accurate to enable us to say what the actual effect of their expenditure and receipts was in London. As I have said, the rentals in London were 44 per cent. of the capital expenditure with regard to London. Now that they are amalgamated the gross rental is only 15 per cent., so that the process in the last few years has been so to increase the capital that the gross rentals themselves form a very much smaller percentage of the capital. Further, we were able to compare the expenditure in a town like Christiania. There they only charge 4*l.* 8*s.* 11*d.* per annum, and yet their gross rentals amount to 26 per cent. of the capital. That seemed to us to be very remarkable.

1624. Are you aware that the Telephone Company of which you are speaking (the United) only did telephone business in London, but drew revenue from other parts of the country ?—I believe at first the United Telephone Company was purely a London Company, but afterwards they did draw revenue from other parts of the country. I notice, in 1884, there was an expenditure of 13,000*l.* in other parts than London. That is so. I thought I said so, that they did extend their operations ; but at the same time, in 1887, those figures that I have given are figures which refer to the Metropolitan district only. They are these : The gross revenue for the Metropolitan district was 100,899*l.*, and the total capital expenditure on the Metropolitan system was 228,180*l.*, which works out at the 44 per cent. that I gave. I mention that to point out that London is in a very much worse position now than it would have been if

*Chairman*—continued.

there had been no amalgamation at all ; and if the United Telephone Company had gone on working as it was working then for London, London might have expected some diminution in the charges, because they were in a position then to receive as gross rentals 44 per cent. of their capital expenditure ; now they are only in a position to receive 15 per cent. of their capital expenditure ; and the same remark applies to the profits of that company. In 1889, that is to say, the year before they amalgamated, the total profit of the company was 94,264*l.* That, on their nominal capital of 900,000*l.*, was 14 per cent. I am not aware exactly what percentage they paid in that year. I know that in 1887 they paid 13 per cent., and probably what they paid in 1890 was 14 or 15 per cent. Then if that company had gone on paying 14 per cent. there would have been some chance of a reduction of the charges ; but the process that took place was this, that this 900,000 shares of the United Telephone Company was taken over by the National Telephone Company, and they paid 1,484,375*l.* for it, so that it is now represented as a capital of 1,484,000*l.* paying a dividend of something under 5 per cent., whereas if it had gone on alone without that transaction it would have been 900,000*l.* paying a dividend of 15 per cent. That is the process, or the effect, of all these amalgamations. Instead of having a company doing a good business with a chance of a reduction of charges, you have got this enormous company paying only a dividend of something under 5 per cent., which is not likely to give any opportunity for a reduction of charges ; and that must be taken into consideration together with the fact that these original shares of the old company are still earning their 15 per cent. The 900,000*l.* was paid for by a larger capital value in shares of this new company. They now receive 5 per cent. ; but at the same time the individuals who own those shares must be receiving their 15 per cent. all the same, so that the result of the process of amalgamation of these companies (and the same thing holds good with other companies) has been what I have said, to so reduce the nominal rate of interest without reducing the amount of money that the shareholders receive, that there is a very small chance of any reduction taking place in the charges for telephonic service.

1625. May I put this to you : assuming these are facts (and I do not suggest the contrary) what inference do you draw from them. Upon this what are you going to propose as a remedy ? —May I give you one instance more ; then I will come to it. As I say, this is one instance of amalgamation. The most recent instance is the new company. The National Telephone Company, as far as we can understand, took over the New Telephone Company with comparatively very little capital expenditure on works, and they paid 120,000*l.* for 3,000 1*l.* founders' shares, and also 74,700*l.* for premium on other shares. All this goes to swell the 5 per cent. earning capital of the company, and so to render it almost impossible to reduce the charges for telephoning London unless something else is done. Then it seems to us that the only way to reduce those charges is to place the National Telephone Company

*Chairman*—continued.

pany again face to face with some kind of competition, and the effect of the agreements is, as we conclude, to do away with the possibility of competition.

1626. I understand you to mean that, whereas competition in the past has brought the National Company into a position which necessitates their making heavy charges, you would re-introduce competition in order to remedy it, and have more of the process which you have been describing?—Well, it depends upon what the position of the company will be in 1911. A thorough competition, an existing competition, and not a bought-up competition, would undoubtedly in 1911 result in this: that the Government would be able to take over the telephone system at a sum which would not be an exorbitant sum.

1627. Or rather, two telephone systems?—It need not take over two. There will be nothing to oblige the Government to take over two telephone systems in 1911 except the fact that the people in England will want telephone accommodation, and if telephone accommodation is existing in addition to the National Telephone Company's accommodation, then the Government will be in a very much better position than it will be if it finds itself face to face with only one concern giving telephonic communication in England. That really brings us to the position which I think I can say the Council takes up, namely, that if the National Telephone Company is to go on with the benefit of those agreements it ought to be understood that any municipality who were willing to do the work themselves, and could see their way to do it at no unreasonable expenditure, should have the permission of the Post Office to carry out a telephone system.

1628. Is that all you wish to say?—Yes.

Sir *James Fergusson.*

1629. You have referred to the terminal charges which you think are enhanced in case of a message passing between a company and a new licensee; do you think it would be fair to give the subscribers to a small exchange the benefit of the whole system of the National Telephone Company or any other large telephone company without such company having something for the free use of its system?—Of course I can see that that is a reason why the clause is put in. I was only stating the effect of it, which seemed to me to render competition impossible. Supposing there was a competing system, either municipal or otherwise, in London, it would render it almost impossible for that competitor in London to compete with regard to sending telephone messages to other towns in England, because we should be in London at very great disadvantage in that in almost all other towns the National Telephone Company are there. The National Telephone Company would make terminal charges on any message emanating from a competing system in London, whereas on its own it would make no terminal charges.

1630. But, supposing you to succeed in obtaining municipal licenses, in what way could the municipal exchange be placed in connection with the telephone system all over the country? Unless the sender of a message is to pay something for that great accommodation, why should the subscriber to a municipal exchange have the benefit of the established system all over the country without paying something for that privilege?—I do not know that I can argue the contrary. As I say, my observation was made more as to the effect of it. Of course, we object rather to the whole system of handing over this business to a private concern; that is the reason.

Sir *James Fergusson*—continued.

1631. I only want to get at what you suggest as fair. You say that the subscriber communicating with a foreign exchange is subject to a terminal payment. Well, I say, could you suggest that it would be fair that we should have that privilege without payment?—No, I can only suggest that it should be left to agreement.

1632. Would it not be the same thing as if the holder of a ticket on the Metropolitan Railway, wanting to travel to Birmingham, should expect to be carried free beyond the bounds of the Metropolitan Railway?—I can very well understand what your argument is with regard to that. It is perfectly reasonable naturally. The other company asks for some sort of payment.

1633. Can you maintain it as a fair objection to the agreement, or to the effect of the agreement, that a local subscriber having the benefit of a great system should pay something for it?—I do not think I can go beyond what I have said. I merely quoted that to show how it would affect any competition that might take place.

Mr. *Snape.*

1634. In the estimates that you have laid before us you are of opinion that a lower charge than that which at present is made could be made without loss if you had these powers. In the framing of those estimates, was the retention of the present area contemplated, or a restriction of the area?—I think I was right when I stated that we contemplated working in the county area alone.

1635. That is not so large an area as the existing area?—It is not so large as what they call the London area.

Sir *Julian Goldsmid.*

1636. You told us about a fifth?—I should think so; I can get the figures exactly.

Mr. *Snape.*

1637. Therefore if you made a lower charge you would not give the same facilities?—We should have to treat places like Kingston and Epsom, and those places, as if they were outside towns; that is what it would be.

1638. Practically it amounts to that; you would make a lower charge, but you would give less facilities?—Of course we should have to treat the other towns as if they were combined with a trunk line. We had figures (which, perhaps, I may give you if I can get them) which showed that a very large proportion, vastly the largest porportion, of the London telephone business is done within the county. The fraction that is done outside the county in the area which the Telephone Company map out as being their

Mr. *Snape*—continued.

London area is very small indeed, compared with the mass of telephone business done in the county of London.

1639. In the estimates you have told us you have taken into consideration the royalties to be paid to the Post Office?—Yes.

1640. Have you also taken into consideration the payment of way-leaves?—Yes, we gave instructions that the engineers should report to us what the whole new system, including way-leaves, and everything, would amount to.

1641. Is that for overhead wires, or underground?—Well, if I remember rightly, I think a portion of it was underground; but, of course, it is not only underground.

1642. Then in that case you would not have to pay way-leaves?—No, it is not only underground; I understand an underground system would be much more expensive, entirely an underground system.

1643. How is it that a company which started in Manchester could work at 5*l.*, and yet your most favourable estimates do not give a much less charge than 10*l.*?—I understand way-leaves is one very expensive matter. Then, of course, everything is more expensive in London, no doubt.

Sir *James Fergusson.*

1644. I do not know how you get at that 5*l.* at Manchester. I have just come from Manchester, and they told me they paid 10*l.*?—I said they did. The Mutual Company did charge; I did not say they do now.

Mr. *Snape.*

1645. If the result of this inquiry should be that the National Telephone Company is left in its present position, is it your opinion that it should have greater powers conferred upon it to make it more effective in the supply of telephonic communication?—No; because I think the more powers the National Telephone Company get the more expensive it will be to buy up in the end; in fact, that is what the chairman of the National Telephone Company himself stated in his evidence in 1892.

1646. Then if other municipal corporations desired (supposing the National Telephone Company continued in its present position) that it should have greater powers conferred upon it to make it a stronger company, you would differ from that view?—Personally, I should.

*Chairman.*

1647. You are aware, I suppose, that in 1911 there will be nothing to buy up: the life of the company ceases to exist?—Yes, sir; that is always what I should hope; but it is not what was contemplated at the time that Mr. Forbes was giving evidence with regard to the Act of 1892.

1648. Contemplated by Mr. Forbes?—By him. If I may, I will just read what he said. Mr. Lamb had said that he estimated it would be worth to anyone in 1911, a million.

1649. That, I think, is that the plant would be worth that?—No; this is what Mr. Forbes says——

1650. I do not think it is worth while reading that question?—You have put it to me, sir.

*Chairman*—continued.

1651. If you wish to read it, certainly do so?—He says: "Then as to the terrible thing, which caused me almost a sleepless night, that at the end of 19 years, which is our tenure now, about under 20, this enormous capital of ours is put down as worth a million. That startled me very much. Of course, if it is true, it is alarming, because we have not only to earn a reasonable dividend upon our capital in 19 years, but we have got to redeem it down to a million. But I think we may dispose of that by this, that at the end of that 19 years, if this business is carried out, I suppose in conjunction with the Post Office, with whom we desire to work most cordially and loyally, we shall have the best telephone system in the world, if money and skill can get it. Then I do not think that the Post Office or anybody else would take that over at a greatly depreciated cost. The element of going value would have to be considered, and not old iron." That is what I said was also my view, that if the National Telephone Company remains in possession with its present facilities and enlarged facilities, the Government will have to take them over at a very much enhanced cost.

1652. That is to say you agree with the view of the chairman of the National Telephone Company?—I agree that that is what would happen unless something is done.

Captain *Bagot.*

1653. You objected to terminal charges, did not you; supposing the municipality or the County Council had an exchange, terminal charges would be charged by the National Telephone Company; is not that so?—Yes; I think that would work out very disadvantageously to others.

1654. Would not the subscribers of the National Telephone Company, supposing that London had its own exchange, equally have to pay terminal charges to the London Exchange; the subscribers to the National Telephone Company, say at Birmingham, Manchester, or Liverpool?—No.

1655. They would not?—My view of the agreement would be that a message emanating from London, received at an office of the National Telephone Company, sent on to Birmingham, and delivered there by an office of the National Telephone Company, would not pay any terminal charge.

1656. No; but supposing London to have its own exchange, the message sent to Birmingham would be subject to the charges of the National Telephone Company for distribution inside their exchange; that would be so, would it not?—If they made any terminal charge; but they did not contemplate making any terminal charge. If I understand Clause 8 of the agreement they do not contemplate making any terminal charge for the delivery of a telephone message which has passed through nobody else's lines but their own.

1657. Supposing London had an exchange, and the message were passed over the private exchange belonging to London to the National Telephone Company?—Oh, yes, in that case. In that case there would be a terminal charge imposed for the delivery of the message.

1658. Sir James Fergusson pointed out that to expect those messages to be delivered free

over

Captain *Bagot*—continued.

over the National Telephone Company's system would be the same thing as if the holder of a ticket on the Metropolitan Railway wanting to travel to Birmingham should expect to be carried free beyond the bounds of the Metropolitan Railway?—Yes.

1659. On the other hand, would not all the National Telephone Company's messages sent in their own exchanges to London, or in towns which had a municipal exchange, have equally to pay for distribution inside that exchange in the same way?—Yes.

1660. Therefore it would be as broad as it is long. Possibly the National Telephone Company would rather gain, because a great many more messages probably would be sent to London, and much more business would be done by London messages with towns like Manchester or Birmingham than is done at present?—Yes; that is quite so.

1661. Therefore the loss would probably not be in the way suggested. As far as I undestand Sir James Fergusson, he contemplated that the terminal charges would balance each other, or that the result would be rather in favour of the National Telephone Company?—I think it might be well left to agreement.

1662. Exactly; it could probably be agreed upon without increasing terminal charges?—I should think so.

Mr. *Grant Lawson.*

1663. I think you will agree that the larger the area covered by a telephone exchange the better for the subscribers?—I think I agree with all the witnesses in saying that if the Post Office would take it over for the whole kingdom that would be the best arrangement.

1664. Then would you say that the larger the area covered by the exchange on which the subscriber was, the better for that subscriber?—He has more accommodation?—Certainly.

1665. Your desire is that the London County Council should have the telephones in London?—I am not at liberty to say that.

1666. That is your personal desire?—My personal opinion is that it would be advantageous if nothing is done to prevent this practical monopoly to have competition by the municipal authorities.

1667. And the County Council of London to have the area of the County of London?—That is so.

1668. You have had, I think, great difficulty in attempts already to extend your operations into other counties, have not you; not in telephones, but in other matters?—We have never attempted it.

1669. I do not mean in telephones; I mean in other matters?—In any matter.

1670. May I suggest water?—Well, that is a thing which is not by any means settled; it is before Parliament now at the present moment.

1671. Still, you have attempted to extend your benevolent rule into other counties?—I think I can say that in my own recollection we have never attempted to extend our rule into other counties. As far as my own memory goes I am not able to mention any instance where we have attempted to extend the *rule* of the Council into other counties.

Sir *Julian Goldsmid.*

1672. Except as to water?—The water is at the present moment before the House of Commons; and I could not admit it in that matter either.

Mr. *Grant Lawson.*

1673. Perhaps you will allow me to put it in this way: If you did attempt to extend your operations into other counties, you would anticipate that there would be objections?—I think, if we attempted compulsorily to extend our operations into other counties there would be objections; but we do extend our operations into other counties for certain purposes at their request; for instance, we deal with the sewage of West Ham, Tottenham, Wood Green, Willesden and places like that, by agreement. If you mean that we should not be able to extend our telephone service into other counties, I believe myself we should by agreement, although we should not attempt it by compulsion.

1674. You told us, did not you, that Richmond and places like that would have to be treated in a separate manner from your municipal exchange?—They certainly would unless we agreed with them to supply the service; but as I have said before, I have got the figures here as far as we could make them out. Within a four-mile radius from Charing Cross there were last year about 7,000 subscribers to the National Company; in a circle of between four and six-miles radius there are about 350; outside a six-miles radius there are about 350; so that 95 per cent. are within a six-miles radius from Charing Cross.

1675. Just one other point, that brings me to it: where the subscribers are more scattered the expense of supplying them with service is, of course, increased?—Well, I do not know enough about telephone engineering really to answer that; there are all sorts of things come into consideration. The way-leaves for instance, I should think, would be cheaper at a distance.

1676. The way-leaves might?—Still that is only my own opinion.

Sir *Julian Goldsmid.*

1677. You have been good enough to tell us sometimes that you represented the Council and sometimes that you represented yourself. May I ask you whether you represent yourself or whether you represent the Council when you say that you wish to have municipal competition in telephones?—I think there is nothing I have stated on examination in chief which would not be agreed to by the Council and in which I do not represent the Council; but I was asked just now a personal question, and as far as regards that I said I gave my own personal opinion.

1678. My question is extremely simple, could not you answer it: Do you represent the Council or yourself only when you say you are in favour of asking the Post Office for a municipal license?—Certainly, the Council has not come to that conclusion.

1679. Then you do not speak on behalf of the Council?—I think I do. There is nothing I have said that is inconsistent with the views of the Council, with, as I say, the exception of that one answer that I gave then.

1680. You are a man of such ability, I know, that you are quite able to appreciate the question and it is very simple. Then you do not represent

Sir *Julian Goldsmid*—continued.

represent the Council in that matter?—The Council has not stated its opinion to the extent of desiring to establish a competitive supply.

1681. There is another point: When you talk about having municipal competition in the hands of the London County Council, may I ask you whether the London County Council is the road authority for London?—No, it is not.

1682. Then would not the London County Council, not being the road authority, be obliged to go to the local authorities to get permission to take up the roads as well as to go to the owners of private houses to get way leaves?—If the London County Council became the telephone authority, it would have to do it under the powers of an Act of Parliament; and they would necessarily have to obtain such powers.

1683. Therefore they would obtain greater powers than the National Telephone Company possess under the Acts of Parliament under which it works, for the purpose of taking up the streets?—I should think Parliament would give them greater powers.

1684. Therefore you mean you would have to apply to Parliament for greater powers than the National Telephone Company possesses. Then the next point is this: If the Government decided to take over the telephones, supposing they were to grant to other municipalities municipal licenses, would it not be obvious that there would be much greater difficulty in arranging matters when they had 20 or 30 undertakings to negotiate with instead of only one?—I really do not quite understand the question.

1685. You are in favour of asking for a municipal license in order to have a municipal telephone area in London; that would make a second to the National Telephone Company?—That would.

1686. Glagow is in favour of doing the same thing according to the evidence we have had, that would make a third; and we were told there were several other towns having the same desire; let us roughly say there are 20 of them; then that would make 21 with the National Telephone Company, would it not?—Yes.

1687. Therefore there would be 21 schemes or areas of telephonic enterprise with which the Post Office would have to deal, is not that obvious?—That is so; they would have to grant licenses to them.

1688. Not only that, but suppose they wanted to buy them up and become the owner of the whole they would have to make 21 contracts instead of one, that is obvious?—Yes, and for that reason they would get them cheaper I should have thought.

1689. That is a matter of argument. I think I could show, if I wanted to argue the matter, that they would get them possibly dearer; but still, at the same time, I am merely asking whether, in your opinion, you would not concur with the view I have mentioned, that it is more serious for the Post Office to look forward to 21 negotiations than to one only?—That is not my view.

1690. That is not your view; you think they would be furthered and that it would make it easier if they had the larger number. Then we will go one step further: If you were satisfied that it would cost a good deal more to extend over a much larger area (five times as much I think you said, because you said the London municipal area was about a fifth of the total area supplied by the National Telephone Company) would not you think it reasonable that some difference of charge should be made between the London area and the larger area?—As I have said I do not think the London question need be complicated by this question of area; it is quite true they have drawn the line round a very large area (600 square miles) to work.

1691. You will go to another point, "to work." I am only on the area: Suppose you supplied an area of 50 miles it might be reasonable to charge one price; if you supplied 250 miles it might be reasonable to charge a higher price; might it not be so?—Certainly.

1692. Is not that the difference between the London municipal area and the area supplied by the National Telephone Company, the one being five times bigger than the other, according to your own statement?—If you mean that that is the reason why the charge is so high in London I should say it is clear that it is not the case because the actual work done outside is a mere decimal.

1693. We are promised figures about that by-and-by, therefore we shall be able to investigate that. I am merely asking whether it is not reasonable that there should be more or less a proportionate charge according to the area with which the subscribers could communicate. You first of all said you thought it would be reasonable; then you altered it according to the amount of work. Now is it not also a fact that there is no town anything approaching the area of London which can be compared with it. I believe Paris and New York are, perhaps, the two largest towns and the most comparable where the charge is very different from that which is made in London?—As we understand the area through which the Stockholm subscription entitles a man to communicate is a radius of 43 miles.

1694. It is not a radius of 43 miles; it is an area of 43 square miles?—No, I understand it is a radius.

1695. A radius of one mile; we have had the evidence?—Mr. Bennett will give that in very great detail I think I may say.

1696. It is quite wrong. Do you know the population of Stockholm?—Yes, I do; I think I gave it to you, 257,000, about.

1697. Do you happen to know the population of London?—Yes, four and a-quarter millions.

1698. How do you compare the two. You might as well compare West Ham with it, might you not?—Compare it in regard to what, highness of charge?

1699. Compare the municipal service. Are you aware what the rate of wages to telephone operators is in Stockholm?—I hope you will put that question to Mr. Bennett. We have put the question to him, and we understand the rate of wages does not vary very much from the rate of wages paid in London, not sufficiently to account for the enormous difference between the charges.

1700. I did not say it did account for it; I only

Sir *Julian Goldsmid*—continued.

only said: Are you aware what the rate of wages is?—I cannot give it to you.

1701. Well, I may inform you perhaps that it is not above two shillings. Then, when you talk about your municipal license, do you propose to include the city?—I do not think I can go into any proposition of the municipal license, because I am not authorised to say anything on that.

Sir *Charles Cameron.*

1702. I understand you are dissatisfied with present service of the National Telephone Company?—Certainly.

1703. In the opinion of the London County Council, which has consulted various engineers, does it appear that the telephone system in London, as worked by the National Telephone Company at present, is laid out to the best advantage with design, or that it has grown up in accordance with the demand of commercial exigencies?—It certainly has grown up. I should say it has not been so skilfully laid out as it might be now if a new system were laid out.

1704. Assuming that another system were to spring into existence, whether in the hands of a private company or in the hands of a municipality, and carefully designed to lay out London for telephonic purposes, do not you think that when the Government came to take over even the old iron, in the one case or the other, it would make a better bargain by taking the more recently and more skilfully laid out arrangement?—I should say, certainly, yes.

1705. And that precisely is what you meant when you said that competition would bring about in the end the better bargain for the Government?—That, in my opinion, would be the great advantage of competition, and the need for it.

1706. Sir Julian Goldsmid asked you whether the effect of having to buy up more than one company would not complicate the negotiation. Are you aware that when this agreement was entered into there was competition in the field, and that the buying up of more than one company was contemplated?—I have always read the agreement as if they contemplated two companies, at any rate.

1707. You are aware there are agreements with two companies?—That is so; yes.

1708. In connection with competition, I do not know whether the County Council, or whether any of your engineers, in their proposals to lay out London for telephonic purposes, contemplated doing it in parts and not as a whole, and having a series of exchanges and trunk lines between them, and working on precisely the same system as is worked on between the different towns in the provinces?—Yes, I believe that was in contemplation in the minds of the engineers.

1709. Now you are not an engineer, and I am not going to ask your opinion as to whether that would be a better or a worse system than the present one, but I take it that your view is that it is desirable to place no impediment in the way of the development of telephony on that basis?—Certainly.

Sir *Charles Cameron*—continued.

1710. And I presume that your opinion is that competition is the way to bring about the development of telephony?—That is my opinion, as long as the Government does not take it over.

1711. I presume it is your opinion, and so far, that that is the opinion of the County Council, which sent you here?—I think so, undoubtedly; I think I can say that.

1712. You have said, so long as the Government does not take it over, you are in favour of the Government taking over this matter?—Yes.

1713. And in favour of its being a Government monopoly?—Yes.

1714. Are you speaking for the County Council in that, or has the question come up before the County Council, as to the Government acquisition of the telephones?—No, I do not think the Council has decided on that one way or the other. At the beginning of my evidence on the first day, I put in the exact recommendations and resolutions of the Council, in order that there might be no mistake about that. It is in the evidence. If you will turn to page 87, you will see the recommendations about 10 or 12 lines down: "We therefore come to the conclusion that one of the three courses should be taken, namely, (*a*) that severe restrictions should be placed upon the company; (*b*) that the State should take over the company's business; or (*c*) that the municipality, *i.e.*, in London the Council, should do so"; and that was approved.

1715. That is a most distinct expression of opinion on the part of the London County Council in favour, in the first place, of restrictions which are impracticable; and that, being impracticable, it is an emphatic declaration by the London County Council in favour of the State assumption of the telephones in the first place, or failing that, the municipalisation of the telephones?—That is so.

1716. If under this agreement competition is provided for without any buying out; if competition without buying out has from the first been the policy of the Post Office, or, say, for very many years, the policy of the Post Office; do you prefer buying out or competition?—Immediate buying out do you mean?

1717. Yes, or immediate competition?—I should say immediate competition would be the proper course.

Mr. *Grant Lawson.*

1718. With a view to buying out later?—Yes.

Sir *Charles Cameron.*

1719. As to competition, do you happen to know anything about the history of the last telephone company that was bought up; the New Telephone Company?—I know the prospectus; I have it here.

1720. Now, just one other point about the buying up of the telephone companies; that is to say, about the assumption of the telephone business by the State. The position of the telephone and telegraph services in London is rather different from what it is elsewhere, in this

Sir *Charles Cameron*—continued.

this respect, that in London there is a huge telegraph service, and there was before the telephone business was started; is not that so?—That is so, and I think that is a consideration which ought to be borne in mind, because the telephone service, if at the present moment it is disadvantageously affecting the telegraph service in England, certainly will do so in London, to a great extent.

1721. In fact, if the telephone service is detrimental to the telegraph service anywhere it will be more detrimental to it in London than in any other part of the country?—I should say so.

1722. Is there any doubt on that subject in your mind?—There is no doubt in my mind that at present an enormous amount of telegraphic communication goes on within London, that will soon assume the shape of telephonic communication.

1723. To the detriment of telegraphic communication?—To the detriment of telegraphic communication.

1724. But did it not occur to you, or to the Council, that London might be exceptionally dealt with, and that it might be desirable for the Government to make an arrangement for the assumption of the telephone service in London without waiting until they took over the entire business throughout the country?—That is a new idea to me.

1725. It has never occurred to you?—No; at this moment I cannot say anything about that.

1726. You do not happen to know, roughly, what your engineers propose. You have told us that they estimated for an exchange of 10,000 subscribers?—That is so.

1727. And, I suppose, if you were carrying on that business you would ask subscribers who wished to become trunk line subscribers to make a deposit with you, as the telephone companies do, to put them on the other telephone exchanges as they may require?—That would be the case.

1728. The Postmaster General has led you to infer that if licenses are granted, the licenses will be treated equally; as a matter of principle they would require to be treated equally by the Post Office?—Yes.

1729. And if you could give your telephone service on an exchange for 10,000 persons at the low charge which would allow a subscriber to pay sixpence or threepence, or a shilling, as the case might be, to put on to any other exchange in the metropolitan area or in the kingdom, do not you think that you would get a lot of subscribers who would be very glad to make the 5*l.* payment and run the risk of paying when they wanted their messages taken?—I think the development of the telephonic system in London would be important.

1730. That has been the result, has it not, wherever there has been competition?—Certainly.

1731. Did your engineers, who gave you these estimates, suggest that they should stick to all the old arrangements of the National Telephone Company; that is to say, did they propose that they should use the same or improved instruments?—They would use absolutely the newest system, the newest exchanges, the new instruments, and twin wires.

1732. That is to say, they propose to give you a much better system?—Undoubtedly; except that I must say, of course, the Telephone Company is, in some instances, improving its system.

1733. But so far as the single-wire system extends it is necessarily bad?—Oh, yes.

1734. The single-wire system, I believe, extends over a considerable amount of the London area, does it not?—I cannot give you any information about that. It did. They have been doubling their system lately to a great extent.

1735. But you would give the subscribers the newest system of wiring; the newest transmitters. Do any of your engineers mention the time-meter system; to allow a man to pay a certain fundamental charge, and then pay so much for every five minutes he uses the instrument; do you know anything about that?—I do not think that it is mentioned in the estimates. As the Committee are not receiving the evidence of Mr. Binnie and Mr. Newland, might I hand in their reports? We are only too anxious that the Committee should have all this information before them.

1736. Can you give us the gist of them?—They are made up of a lot of figures.

1737. Mr. Bennett is coming?—Yes; but he did not prepare our engineer's report or Mr. Newland's; in fact, I believe all those three reports are based upon different systems of exchanges.

1738. Perhaps the Chairman might allow those reports to be handed in; we can discuss putting them in, provisionally?—I am not quite sure if these are the right ones; but if I may, I will send them to you afterwards.

1739. I do not exactly understand why you seem to think that terminal charges would operate against a competing company?—I think they would in London, because the National Telephone Company in London would be both, and in a great number of towns.

1740. Are you aware that a small company in Dundee, with a capital of 6,000*l.* smashed up the original company, or rather compelled the original company (which is now absorbed by the National) to come down on its knees and reduce its charges from 20*l.* to 5*l.*; and during the whole of its time paid 9 per cent., I think, and got bought up at last. What I ask you is this: If you had competition, take it in Birmingham, Manchester, Liverpool, and you had competition in London, would not the competition which existed in Birmingham, Manchester, and Liverpool compel each company to give the greatest facilities of inter-communication in order to attract subscribers?—Certainly. If in all the towns of the United Kingdom there was competition the terminal charges would not affect us; but in many towns, but as many towns might not think it necessary to have competition, the National Telephone Company having a London branch and a local branch, would have an advantage over London.

1741. When you speak of many towns not thinking it necessary to have competition, you mean

Sir *Charles Cameron*—continued.

mean municipal competition?—I mean *any* competition. If they would have it, it would get over the difficulty entirely.

1742. Of course I am quite aware that a great number of towns are not prepared for municipal competition, but provision is made in the agreement for private competition, is it not?—Yes.

1743. With the sanction of a vote of the Corporation?—Yes.

1744. Assuming that when the Post Office pursued a policy of encouraging competition, you are aware that a large number of licenses was applied for and granted?—That is so.

1745. Is it not reasonable to expect that the something that occurred in the past would occur again in the future, and that application would be made for licenses if the Post Office granted them?—I think it is reasonable.

1746. Would not that ensure a certain amount of competition, and if it did ensure the competition or if it brought about the competition, do not you think that that would do away with your objection as to the impediment of a terminal charge?—Certainly, if it was an actual competition, but not a bought-up competition, it would be right enough.

1747. We all assume that, under this agreement, and under the veto placed in the hands of municipal authorities, buying up ought not to be possible. You are aware that the agreement provides that no competition should be allowed to start except with the approval of the municipality?—Yes, I do know that.

1748. And that would only be granted or might only be granted, at all events, on the condition of a guarantee against buying up being given?—Yes.

1749. Would that prevent the difficulty?—It would.

Mr. *John Ellis.*

1750. Such questions as I ask you will be directed to giving you an opportunity of offering some little more definite evidence than you have given us with respect to your statement that the service is not good, and that complaints are made very generally. Now, as to this Committee, whose spokesman you are, may I ask if it received any evidence as the insufficiency or imperfection of the telephone system throughout the area?—No, the Committee has not received any evidence at all.

1751. Did it make it known that it would receive any complaints?—No, I spoke entirely generally, and I should like to restrict my observation to "generally." It is the general feeling that the telephone service was very inadequate, and still is inadequate, although I say it is improving.

1752. I am afraid in Parliamentary Committees we require something a little more definite. Can you lay before us any specific complaints that have come to your Committee with respect to the imperfection of the telephone service in London?—Well, I have lain that one before you.

1753. Very well then, I will deal with that in the first place. This is the complaint of the vestry clerk of the Parish of St. Mary, Battersea.

Mr. *John Ellis*—continued.

Have you made yourself master of this?—I read it through. If I may interrupt for one moment, I was not going to give any evidence upon this. I suggested to that gentleman that he should give evidence himself. I do not know whether he has applied to give evidence, but the Committee of the Council did not think it was their business to go in detail into this question. The Committee of the Council at that time were dealing with the agreements entirely.

1754. That is what I want to get at?—And the objection to the agreements; and we have not got any evidence, I at once say so. I merely made that general statement in the words of the chairman of the company itself; he said that the London service was very bad a very few years ago, and although it is getting better, it is still the subject of complaint.

1755. I want to confine myself at the moment to this complaint. Does not this apply really to a particular wire between two particular places, and defects therein, in September and October, 1894, and have you noticed that at the end of the complaint these words occur, that the lines are at the present time, namely, 3rd April 1895, working satisfactorily?—Yes.

1756. Then that is the end of that complaint?—That bears out what I say.

1757. A private wire that was. Have you noticed that that was a private wire?—No, I have not noticed that.

1758. Then you have not made yourself to that extent familiar with that complaint?—As I have said, I read it through.

1759. Then we have it clearly from you that coming before us as the representative of this Committee of the London County Council, you do not deem it necessary to put before this Committee any specific illustrations of the imperfection of the service in London. I only want to get at the facts, you know. That is so, is it?—Well, we have not done it.

1760. As a matter of fact, you do not come into the witness chair possessed with proofs of your statement that complaints are made very generally?—Certainly not.

Mr. *Solicitor General.*

1761. These resolutions that you have laid before the Committee are resolutions that were passed by the committee of the late County Council, are they not?—Both, please.

1762. Adopted; well, originally resolutions?—There were two meetings, one the old, the other the new.

1763. These ones that are referred to in your evidence under the sub-heads "a," "b," "c"?—That was the old Council.

1764. That was the old Council?—Yes. Then lower down the page, "26th March 1895," it was the new Council; the new Council had before it the considerations in view of the report of the former date.

1765. I did not follow that these were specifically before the County Council on the 26th March. I will read you what you said?—It is down here exactly: "We reported on the 12th February last that after careful examination of the proposed agreement between the Post Office authorities and the National Tele-

Mr. *Solicitor General*—continued.

phone Company, we were of opinion that the interests of the people of London would be, to a great degree, prejudiced by the power to be given under the agreement to the company, whose existing monopoly would be further strengthened."

1766. You do not specifically there allude to the recommendations, or rather to the strictures, which are included in "a," "b," and "c," strictures and recommendations?—The report of the 12th is mentioned, and it was freely dealt with in discussion. This matter was discussed at length and divided upon.

1767. I will tell you exactly what I want to get from you if I can, that is, whether those three "recommendations," I will call them, which appear under the heads "a," "b," and "c," were specifically brought before the meeting of the 26th March and specifically adopted. That is what I want to get. I do not gather that from the data you have given us; it may be so?—No, you would not gather that; but I am perfectly justified in saying that these considerations were in the minds of the Council and were discussed on the 26th March, and were the reason for the division which took place upon the 26th March.

1768. How had they got into the minds of the Council?—Because the recommendation was this: "We have, therefore, asked the deputy-chairman and the engineer to give evidence. We think it advisable that one or more of the experts who advised us previously to the interview between the Postmaster General and a deputation from the Council on the 4th February last, should also give evidence before the Select Committee on behalf of the Council; and we recommend: That the Highways Committee be authorised to take all necessary steps for properly placing the Council's views before the Select Committee of the House of Commons on the Telephone Service."

1769. Will you forgive my saying that I have already read all that; I want really to ascertain whether you can say, one way or the other, whether those three things, "a," "b," and "c," were specifically brought before the meeting of the 26th March?—Yes; I can say specifically "yes" to that.

1770. In form; the whole question turned on what the views of the Council were?—The debate turned on what the views of the Council were, and it was stated by the chairman of the Committee and myself that the views of the Council were to be gathered in the report first of all, which had been adopted on the 12th February, and also the statement which was made by myself before the Postmaster General on the 4th February, a copy of which had been circulated to every member.

1771. In some one of those ways the whole three, "a," "b," and "c," were brought before it?—I am sure the division turned upon the views mentioned in the former report.

1772. There is only one other question, that is, has he the empowering of the municipal authorities; have you considered the question at all as to the term. I mean, do you contemplate the permanent licensing of municipalities?—No; my own personal view is that the State should take it over.

1773. I apologise for interrupting you, but I understand also that the view you have expressed with regard to municipalities taking it over is your own view; is it your view, or is it the view of the Council?—It is impossible for me to say that the Council desire to enter into competition at this moment, because they have not decided to do so; but my own view has been that if no other course is taken to prevent the National Telephone Company getting such a valuable monopoly that then it would be advisable that the municipalities should have the power to compete; and, if I may say one thing further, at any rate it ought to be an understood thing that the National Telephone Company should be subject to the possibility of competition by any municipality who liked to take it up.

1774. I do not object to your adding that at all, but did not you, in answer to Sir Julian Goldsmid in an earlier portion of your examination, state that the view as expressed by you with regard to the granting of powers to municipalities was your personal view, and not the view of the Council?—You must take it to be so.

1775. I "must take it," you said so?—Yes.

1776. I was asking, just now, whether you had considered the question of the length of the term which should be granted to municipalities, or whether you contemplated a permanent grant to a municipality?—No; my own idea would be that if the municipality obtained powers to establish a telephonic communication system, that then whenever the State took it over for the whole country it should take it over from all municipalities, but that it should take it over at a reasonable price for the expenditure which the municipality had undertaken.

1777. That is rather departing from the point I wish to have your opinion upon. Then, subject to the State having power to purchase, did you contemplate a permanent, or rather I will put it in this way, you did not contemplate any limitation by a term of years in the case of a municipality?—I do not quite understand. Why "a term of years"?

1778. I am not arguing as to "why"—I am asking what your view was. Did you contemplate that the grant to a municipality should be for a term of years?—I should think the grant would be made for a term of years to municipalities.

1779. That is to say, you would treat the municipalities as you would any other body or company?—Certainly.

Sir *Charles Cameron.*

1780. And would you be prepared yourself to recommend to the London County Council as a condition of a license that it should be terminable at the same date as the present telephone license?—Yes; my own opinion would be that that would be possible and would be advisable.

*Chairman.*

1781. Can you say whether the estimates which you have mentioned took into account the

*Chairman*—continued.

necessity of a sinking fund to replace the capital expenditure within a term of years?—No; it would take into account the sinking fund within the ordinary 60 years—that is quite true.

1782. And it would materially alter the result of the estimate if there was a sinking fund to replace the capital within the term of 17 years—which is the term of the National Telephone Company?—Not if it were understood that the Government was going to take it over upon paying the cost price. If the municipality was to establish a telephonic communication it would spread the capital expenditure over the 60 years; then if the Government stepped in they must take that liability off the shoulders of the municipalities.

*Chairman*—continued.

1783. Although it might not be a system which the Government could utilise—it being a competing system with the National, and Government only requiring the one system?—I must correct myself. We did make the estimate upon a sinking fund of 25 years only, so that probably even then the London County Council might be quite willing to undertake that risk.

1784. You say the difference between 25 and 17 would not be very material?—Yes.

1785. Of course you are aware, at least I believe it is the case, that the London County Council, even if the licence was granted to them, would have to come to Parliament for statutory powers?—That is so.

Sir Edward H. Carbutt, Bart., called in; and Examined, as follows:

*Chairman.*

1786. I believe you are a member of the Council of the London Chamber of Commerce?—Yes, I am.

1787. You are also a member of the special committee appointed by the London Chamber to consider the telephone question?—I am

1788. And I believe you are Chairman of the Engineering and Allied Trades Sections of the Chamber?—I am.

1789. The Chamber has, I believe, passed certain resolutions relating to the telephone question?—They have.

1790. Perhaps you will hand in a copy of those resolutions; and I believe you have come here, shortly, to support on behalf of the Chamber the general propositions contained in those resolutions?—I have.

1791. Then will you make the statement which you have come prepared to make in support of them?—I may state that the London Chamber of Commerce consists of about 6,000 members, and at the present time our president is Sir Albert Rollit, but I wish to guard myself by saying that although Sir Albert Rollit happens to be a director of the Telephone Company he has taken no part whatever in the discussions that have taken place on this question; he distinctly stated that he would have nothing to do with it. Then I beg to state, sir, that the gentlemen who formed the committee to discuss this question consisted of Mr. Garcke, who is Chairman of the Electrical and Allied Trades sections of the Chamber; he is also the managing director of the Electric and General Investment Company, myself as Chairman of the Engineering section, Major Flood-Page as a director of the Edison and Swan United Electric Light Company, Major General Webber of the Chelsea Electric Light Company, and past president of the Institution of Electrical Engineers, Mr. Bennett of the New Telephone Company, Mr. Chambers, who is a gentleman of commerce and a vice-president of the Chamber, Mr. Henry Clarke, of the London County Council, and also in business in London, Mr. Crompton, the President of the Institution of Electrical Engineers, Mr. L. Gaine, the general manager of the National Telephone Company,

*Chairman*—continued.

and Mr. David Howard, who represents commerce as well as being a past chairman of the Council. Then, sir, I wish to guard myself by saying that although I am an engineer I have not come here to give any engineering evidence whatever. Of course that will be put before you by the experts. Then I wish to say that in the opinions that I express I do not wish to express any opinions of my own; I have come here merely as the mouthpiece of the committee. The committee, of course, took the agreement as practically settled, as having been accepted by the late Chancellor of the Exchequer and the present Chancellor of the Exchequer; but what my chamber wished me particularly to ask this Committee to do was this, to see that we should have properly controlled competition. The impression of the committee, as I understand it, is this, that telephony is in its infancy. If facilities are properly given a very large amount of our trade that is done in other ways will be conducted through the telephone. We believe that if the telephone company, perhaps, endeavoured to make it more known—that is, by granting licences for telephones in private houses, and by wiring hotels as they do now in Paris, where you order everything through the telephone; in that case the public would become so impressed with the necessity for the telephone that it would be much more largely used than it is at the present time. Then, sir, they wish me to state that they want varying rates for limited service. What they consider is this; of course for a rich firm or a rich man the question of what a telephone costs per annum does not amount to anything; it amounts to very little indeed on the amount of money he spends on business, and whether he pays 10*l.*, 20*l.*, or 50*l.*, the impression is that it does not affect them; but there are a large number of cases, they consider, where it would be advantageous if you could get smaller areas. Suppose you took the case of a residential district where people could not afford to keep servants to go out and do their errands, if they could get connected with the shopkeepers they could afford to pay something like 3*d.* a day or 1*s.* 6*d.* to 2*s.* a week for the use of the telephone.

*Chairman*—continued.

At the present time the tradesman has to send his cart round; the man waits for orders, and there is a large loss of time in that way.

1792. When you speak of varying rates for limited service, do you refer merely to limited areas?—Yes, the smaller areas; that is to say, what we want to encourage is that it shall be within the reach of the poorer classes of the people as well as of the rich. If one district is a residential district, or in another district there are certain manufacturers, and you could limit your area to that; we consider that would encourage the use of the telephone, that it would be a special benefit; and of course when you come to a place like London you find a large number of people who do not want the whole service of London, that is, the whole of the 650 square miles of area. I may say I have read all the evidence, therefore I do not wish to go over anything two or three times. You have it in evidence that as the number of telephonic subscribers increases so your expenses increase enormously.

1793. You are aware that the policy of the Department, as indicated by the agreement, has been to restrict the operations of the company within limited areas?—Yes.

1794. You want to go still further?—We want to go still further. We go so far as this: even taking the agricultural districts at the present time what you are endeavouring to do is to get collectivism on farms. Everybody there send their milk to a creamery or butter-making establishment in a neighbouring village. If near a village where there are 20 farms there were some easy means of putting up a telephone between the milk farms and connecting with the station a creamery company, it would pay the farmers and it would pay the company which started it. We believe you could start numerous small companies in agricultural districts, which would be of very great advantage in encouraging agriculture. Of course, I am well aware the difficulty would be to get an Act of Parliament for it, or to get powers; but what we would want you to do would be to apply for the powers that are being applied for in the Bill which was brought in last night for Light Railways by the President of the Board of Trade. That Bill we know something about in the Chamber of Commerce. What I understand as to that is that if a light railway is wanted in the district, and in the same way if a telephone is wanted in the district, you would apply to your district council or parish council, and having settled what you want you would go to the County Council for powers, and the County Council would then apply to the Board of Trade. Of course, if it became a question of the telephone, they would have to apply still further to the Postmaster General; because we consider that the Postmaster General must keep his hand on the question of competition; he could not allow 20 different companies in one district; but we think that competition is the best way of dealing with this; not only for the country, but for the general welfare of all the people. What we consider is that, of course, trade must be encouraged; and the only way to make trade go on is to give the greatest amount of facility for carrying on that trade, either by railways, by telephone, or by telegraph; and if the Postmaster General considers that the telephone is trenching on the telegraph revenue, all we say is that the trade of the country is sufficiently great to warrant him in encouraging the telephone system as against the telegraph; and, in that way, endeavouring to encourage the trade of the country.

*Chairman*—continued.

1795. Do you suggest that this should be done by different companies all over the country?—We even go so far as this; mentioning, again, the agricultural district: Suppose there was a creamery started (there are numerous creameries in all parts of the country), and farms connected with it; if the son of somebody in the district happened to be brought up as an electrical engineer, and liked to take the trouble to put the telephone up, he would put it up for about 100*l.*, and connect some 20 farms with this creamery. You would by that means increase telephony. You would also make it a benefit to inventors to find out something new, if there was anything to find out. At present the telephone is such a simple thing to put up for small areas that there would not be much to find out.

1796. When you speak of 100*l.* you have not gone into estimates and figures, have you?—No; what we say is that in a small area you can get a pair of telephones for a couple of sovereigns, and your post and wire do not cost you very much, I only mean a very small establishment indeed.

Sir *James Fergusson.*

1797. May I ask one question at this stage: Have you formed any idea whatever of what the cost would be of carrying the telephone to a circle of farms round the creamery?—No; I am only giving an estimate of one member of our Committee.

1798. What does he reckon it at?—He thinks about 100*l.*, but that is only his idea of it.

1799. For 20 farms?—Well, about 10 farms for 100*l.* We have not gone into any serious estimate; we consider that the great thing is to have competition all over; but I am guarding myself by saying that as regards London the opinion has been expressed that if it were possible for the Government to buy up London and to make a system of that; that is to say, if they could buy it up at a fair and reasonable price; then that is another question; we consider that London ought to be dealt with on a separate basis compared with the outside district.

*Chairman.*

1800. You think the Government should buy up the London system, and leave the National Telephone Company to supply the rest of the country?—That is to say, if you could arrange on reasonable terms with the National Telephone Company, because London is so great, and the amount of the exchange is so enormous that a very great difficulty as far as we understand is taking place in being able to get the exchanges carried on; that is to say, supposing the number of subscribers trebled in London, I fancy you would find very great difficulty in caarying on the exchange; therefore we think it would be much better, if it could be done reasonably, that it should be done by the Postmaster General. Then, sir (I do not know whether I

*Chairman*—continued

am giving my evidence in the proper way, what we want to do is to take it as shortly as we can), we consider that if you agree to competition, some standard regulations ought to be drawn up applicable to all towns the same as standard regulations by the Board of Trade for the electrical companies. It would be far better to have standard regulations which would be carried out applicable to all towns if possible.

1801. Do you suggest that those standard regulations should apply to the existing National Telephone Company?—You could not alter that at present for a good many of the things they have done, but in any future arrangement we consider it would be advisable both in the interest of the National Telephone Company and of the country, that some standard regulations should be drawn out.

1802. You are aware that the National Telephone Company have a licence which lasts for another 17 years, are you not?—Yes.

1803. A licence which is unrestricted; you would not impose regulations arbitrarily upon them?—No; but suppose they wanted to break new ground, could not you ask them if they would not accept the regulations for the new ground?

1804. Their licence covered the whole of the United Kingdom up to the coming into force of this agreement, and since that time it has been restricted to *areas;* so that there would be no question of opening new ground?—We wanted, in case you granted competition, that this should apply to all the new companies. Then what we also wanted to state was, that in granting licences, precautions should be taken not to neglect the unprofitable areas. We think that if the licence is granted to a company to put down a telephone system in a large district, they ought to be careful that the unprofitable area is not neglected. I might just say that we talked of putting in a large amount of evidence as regards excessive rates and things of that kind, but we think that that would be better put in by other people—it is so excessively difficult to judge of it ourselves. You cannot compare these things unless you know all the circumstances.

Mr. *John Ellis.*

1805. I should like to ask you a few questions on what you have just been saying: What did you mean by "unprofitable"?—Well, where it is not likely to pay.

1806. Then supposing a licensee has wires in an unprofitable area, he makes a loss there, I presume?—Yes.

1807. Then, if it is a commercial company, how would you provide against that loss? Would you allow it to recoup itself by higher charges in other areas?—It would have to take the good with the bad.

1808. That is to say, that the persons in area "A" would have to pay more than they need, so that the persons in area "B" might be supplied with telephonic communication?—Unless competition kept it down.

1809. I am asking; I want to get your view; do the Chamber of Commerce suggest what I have indicated, that persons in area "A," that being a profitable area, should pay more than is necessary to recoup the loss in area "B," which is an unprofitable area?—No, I do not quite agree with that.

Mr. *John Ellis*—continued.

1810. How would you raise the necessary revenue in the case of area "B"?—The price would be fixed by the competition between the two companies, and the company in considering its application would consider the question as to whether they would lose on one district as compared with the other district.

1811. You would make it a condition that the company should extend its service, even though it might not be financially profitable?—Yes. Well, that is a proposition.

1812. In the public interest?—In the public interest.

1813. Would you give any sort of subsidy or guarantee to the company?—No.

1814. How would you enable the company to recoup itself as a financial operation?—The company would take the question into consideration in starting, the same way as with a railway; you take certain districts: some parts of the district do not pay you, but other parts do; you take the whole thing and think you will make a profit out of it, and you run the risk.

1815. I am asking you for information, of course?—Certainly.

1816. Do you suggest that you would proceed exactly as the State does with railways and no further?—In what way? I do not understand.

1817. The State does not prescribe to railways what capital outlay they shall make in particular districts. Having once given them the powers, you are aware that it does not say: You shall put down a double line of railway; you shall put certain stations, certain signalling apparatus; it leaves all that to the railway company's own cognizance and control. Do I understand that you would leave all that within the Telephone Company's own cognizance and control?—What we propose is, that we should leave it for the Postmaster General. They would apply for a certain district, and he would have to see that both the unprofitable and the profitable area of that district would be supplied.

1818. Do you suggest that the Postmaster General should make it a condition of the licence that without regard to the profitable or unprofitable area, the telephonic facilities in all districts should be alike?—Yes.

1819. Would you put it at that?—I should put it at that; yes, I will say "yes" to that, otherwise you would be having people picking out just little bits.

1820. Then, supposing the company said to the State, or to the Postmaster General: We cannot carry on a commercial undertaking if you impose such a position upon us without some sort of State guarantee, how would you meet that?—They should have no State guarantee; we want private competition.

1821. As I understand (and I am really anxious to arrive at what is in your mind), you would impose upon a commercial undertaking extensions which it was known would be unprofitable?—Yes; in the same way as you impose conditions upon railways.

Mr. *John Ellis*—continued.

1822. You put it exactly in the same way as it is put as regards railways; no higher?—Yes, only it is a different question: you cannot tell a railway company to go into a certain district when they do not want to go there; but it is a very different question taking the telephone.

1823. Would you impose upon the company the condition of laying down wires and providing wires where they did not desire to?—If they took up a certain district I would; it is only in case they take up that district. What we wanted to guard against was this: we wanted to guard against a company taking up a certain district, and having got the authority of the Postmaster General for that district, they say: "We will only take the profitable part, and leave all the rest out." If the license is once granted, we desire that they shall not be allowed to take up the best portion, and leave the remainder.

1824. Would it meet your views if the same procedure were followed as under the Electric Lighting Act with regard to compulsory areas, that in a certain area a person shall have the right to receive certain services?—Yes.

1825. Is that what you mean?—That is what I expressed when I stated that we wanted standard regulations making.

Sir *Charles Cameron.*

1826. You have said that you did not contemplate any subsidising; but in connection with the system of agricultural telephones which you have referred to, and which I think you are the first witness to have referred to, do you see any reason why parish councils and county councils should not be empowered, if they thought fit, in the public interest, to subsidise telephonic exchanges?—The chamber of commerce did not draw any distinction between parish and county councils as compared with private companies.

1827. What I ask you is this: do you see any reason why parish councils or county councils should not be licensed to occupy with their telephone system, devised for the benefit of the area over which they rule, unoccupied areas; do you see any reason why they should not be authorised to receive a license for these unoccupied areas?—Well, I take up this ground: that I am giving the opinion of the chamber; and my chamber, in discussing the question of the municipalities and local boards, merged it all in private enterprise.

1828. That is quite true; I will take it on private enterprise, and say: Allow private enterprise to fill up the unoccupied gap in the counties; can you conceive any reason why the local authorities should not be empowered to make a grant in aid if they thought the enterprise beneficial to the district?—Well, personally I should not; but I cannot give the opinion of the chamber as to that.

1829. I suppose you had this brought up before you?—Yes, certainly; but we will not express an opinion upon it.

1830. We in this House know your rules, and I am sure the Committee value your opinion; you say you see no objection to that?—No. Personally I should not believe in the county council or the parish council providing money for it. Of course, the same question turns up on the light railways. Personally I should object to the county council or parish council providing money for these telephones or for the railways.

Sir *Charles Cameron*—continued.

1831. Subsidising the telephones or the railways?—Yes, that is my personal opinion, but I have no right to give my personal opinion. I guarded myself as to that.

1832. You have explained what you mean by varying rates for a limited service; you have explained that in small districts people with few servants might find it a great convenience to be put in telephonic communication with the neighbouring tradesmen?—Yes.

1833. I suppose that contemplated the establishment of a number of local exchanges rather than a concentration of all London in one central exchange?—Well, it was more as regards outside districts, but of course we contemplated it as regards London.

1834. You contemplated it as regards London, too?—I believe it has been tried by the company, and they have not succeeded in making it pay; still, the opinion of my committee was that it ought to be tried, and could be made to pay.

1835. Where was it tried?—I think you will find out that from the company; the company will give you that.

1836. As you have mentioned it, and it is the first I have ever heard of it, I should like you to give us some assistance upon it?—I was told it was tried in Kensington, but I am giving you that for what it is worth.

1837. You live in Kensington, do not you?—No.

1838. You do not know anything about the experiment personally?—No. The secretary of the chamber tells me it was tried in Kensington and in Croydon: I only say that was our idea. We understood it had been tried, but I have no doubt that other evidence will be forthcoming to show that it has been tried. I am very sorry I cannot give you the particulars.

1839. You have a resolution here about the trunk line tariffs?—We took that out. We came to the conclusion that we could not give evidence about it without knowing all the facts of the case.

1840. You have said that Sir Albert Rollit, the president of the chamber of commerce, had entirely kept out of it?—Entirely. At the first meeting which took place upon the subject he got up and said, "I am a member of that board, and I will have nothing whatever to do with it," and acted in the most honourable manner possible. I thought it better to put that in in evidence.

Sir *Julian Goldsmid.*

1841. You said there was a committee appointed, and you have given us the names; how many were present at this meeting when the resolutions were adopted?—They have been adopted twice or thrice, I believe.

1842. There were four or five present, were there not?—There were more than that.

1843. Six?—Well, I think the resolutions met with the general approval.

1844. About six members were present?—What I would say is, that they met with the general

Sir *Julian Goldsmid*—continued.

general approval of all the members, as I understand.

1845. But about six members were present: was not that so?—I could not say without having the minutes before me.

1846. Were these resolutions adopted by the Chamber of Commerce itself?—They were brought before the council, and were adopted by them, and the council then settled who should give evidence; and they thought that it was better, from my being a member of the executive council, that I should give evidence, on the understanding that nobody gave any evidence except what had been passed in these resolutions.

1847. Your main resolution was No. 3: "That properly controlled competition should be encouraged, providing that intercommunication between different systems covering the same area can be satisfactorily arranged, and subject to the Post Office authorities deciding, after due and adequate enquiry, that the public can be better and more economically served than by the existing arrangements." That is a very limited approval of competition, is it not?—Well I do not know; we put it in for what it is worth.

1848. I quite agree. Then, practically, you would leave the matter to the Post Office, according to this resolution?—No, I do not think we should leave everything to the Post Office.

1849. Subject to the Post Office authorities deciding after due examination?—Yes, we would leave all that, but not as to whether there should be competition or no competition. As I understand, that is what this Committee is sitting for; the main question; to ventilate what shall be done in the future.

1850. Then you talk next about the unprofitable areas, and you propose that a company shall be licensed to take unprofitable areas; that is, I suppose, because the National Telephone Company does not take them; is that so?—No, I do not think so.

1851. Does it, or does it not, take them, in the opinion of your Chamber?—I suppose they may have plenty of unprofitable areas; I have no doubt they have. All we wanted to guard against was, that in case a license was granted, the company to whom it was granted should not just supply the profitable area and leave out the unprofitable.

1852. The suggestion has been, not that new companies should be licensed, because we were cautioned what the result of that would be, amalgamation; but that municipalities should be licensed. Is it your opinion that municipalities will want to take unprofitable areas?—I must not give an opinion as to municipalities. We discussed the question, and we came to the conclusion that we should abide by the words as we have got them, that is competition.

1853. Unprofitable areas I was speaking of?—Well, I suppose it applies to both unprofitable and profitable.

1854. A municipality might be willing to take competition in a profitable but not in an unprofitable area?—Then it would rest with the Postmaster General,

1855. Therefore, the final determination would come again to the Postmaster General?—Certainly.

1856. Therefore, it is practically as I have said: the whole matter would be left, according to your opinion, to the views of the Postmaster General. The only other point is this: "That this Chamber, whilst favouring private enterprise, is of opinion that if greater development of the telephone service which the commercial community demands can be better secured by the State acquiring and working the whole system of telephones, then this Chamber would approve the adoption of such a course." That was the substance, was it not, of the general opinion of the members of the Chamber?—As put there, certainly.

1857. Therefore, all the rest will be subject to that; the State acquiring?—No; this was in reference to the agreement. The main thing is that No. 3. That is the main thing.

1858. The main thing in No. 3 is leaving it to the Postmaster General, is it not?—I think not.

Mr. *Grant Lawson.*

1859. Has the Chamber ever applied to the National Telephone Company on the subject of varying rates?—Well, that I could not say; not as far as I know.

1860. So far as you know, there has been no communication with them?—No. I asked the question whether it could not be applied to a certain district, and I was told it had been tried in Kensington and Croydon. I believe I got that from one of the officials of the company. I think I may state so much.

1861. So far as you know, the Chamber of Commerce has never impressed itself upon the National Telephone Company?—Nothing has been done until this meeting, or the number of meetings, which drew up these resolutions.

1862. Would not you say, to one understanding this sort of thing, that the area of the County of London was more profitable without the fringe of country round it for the telephone?—I should not like to give an opinion.

1863. Would not you sooner have money invested in a telephone exchange in the County of London than in the country around?—No doubt a small company for the fringe would pay better than one for all the telephone exchanges in London.

1864. If a telephone exchange covered the County of London and the fringe round it, do not you think the most profitable area would be that nearest the centre?—That is another question.

1865. I am afraid I put my question wrongly. I want to know which would be the most profitable area?—Where there is the most work.

1866. And that is in the centre?—In the centre.

1867. The centre being the most profitable, you would object to the County Council of London taking the profitable area (the centre) and leaving the fringe; I mean, your resolution No. 6 would object to that?—Certainly; but we should not express an opinion as to the County Council. What we say is that a company, or whoever takes it, should be bound to supply the unprofitable area as well as the profitable.

1868. I will put it in this way: You say any company?—If they apply for that area.

Mr. *Grant Lawson*—continued.

1869. If they applied to control the interior portion they should not leave the rest to somebody else?—That must rest with the Postmaster General.

1870. Your resolution would object to the Postmaster General granting that power?—No, what we contemplated was that the Postmaster General might give competition in small areas of London.

1871. Just one other point; you have mentioned the Light Railways Bill which was introduced last night?—Yes.

1872. By that Bill I daresay you have noticed that the county councils are to give power to make the light railway?—Certainly; but first of all there must be an application from the promoters to the district, and from the district to the County Council, and then from the County Council to the Board of Trade.

1873. Quite so; but the County Council is to be the local authority to whom the appeal finally, as far as the locality is concerned, is to be made?—Yes.

1874. If powers were given of that sort the London County Council would apply for themselves for this power?—Then it would rest with the Postmaster General and the Board of Trade. You see, it would go to the Board of Trade. The reason for this application is to do away with the expense of an Act of Parliament for smaller undertakings. As I say, I guarded myself in reference to London; I wanted to guard myself as to that. The London area, we consider, would want treating differently to outside districts; but what we wanted to do was this: Supposing some country district wanted to put up a telephone for a few farms, we did not want to put them to the expense of an Act of Parliament; and if by the same means as that which was applicable to the light railways they could get what was like a Provisional Order, they could carry that out.

1875. When you say that London wants treating differently to outside districts you refer, I suppose, to country districts, you do not mean the London district?—I mean the 630 square miles which is comprised in the present license.

1876. You would like that to remain?—What we consider is that that would want differently treating to the other; and it would be an open question whether it would pay the Government to buy it out-and-out, if they could arrange terms.

Mr. *Snape*.

1877. What precautions do you suggest the Postmaster General should take to prevent unprofitable areas being neglected?—I should not like to offer an opinion about that. You see as far as we understand, if a company came with a scheme before the Postmaster General, they would say where they were going to lay their lines, and he and his department would know better than anybody else what was the unprofitable area of that district.

1878. Then the general principle would have to be applied to the whole country; you could not make exceptional treatment of one district as compared with another in order to effect your object?—Certainly, that is what we consider.

Mr. *Snape*—continued.

1879. We have had it in evidence from the London County Council, that supposing it established a competing system of its own (it would have to come under that general principle) they could supply telephonic communication to 95 per cent. of the present subscribers to the National Telephone Company at 10*l.* a year; but presumbly they would have to largely increase that charge, possibly to the rate of 20*l.*, which is now charged by the National Telephone Company, if they supplied the other 5 per cent., is it your suggestion that they should be compelled to increase the charge to the whole of London in order to supply the unprofitable area which is constituted (so we understood) of about 5 per cent. of the district?—I do not quite follow you. My suggestion is that if a company comes to the Postmaster General and says, "we want powers over this district," he would apply the same thing, that is to say he would take good care that they agreed to supply the unprofitable district.

1880. I prefer to keep the concrete instance, because we have it before us just now?—I should not like to give an opinion then.

1881. The London County Council tell us they have estimates showing that they could supply at the rate of 10*l.* the telephonic service, within a radius which would comprise, say, 95 per cent. of the present subscribers to the National Telephone Company presumably (we had not the actual figures given to us); but that if they took in the other 5 per cent., which would be the unprofitable area, they would have to very largely increase the charge of 10*l.*: Is it your suggestion that the Postmaster Genaral should take precaution by insisting on the unprofitable area being supplied, even though it entailed a very large extra cost on the 95 per cent. who were within the profitable area; is that clear?—It is clear, but I would not like to give an opinion upon it.

1882. But you do give an opinion?—I must ask you to adopt my way of putting it.

1883. The whole thing hinges upon the precautions; but you cannot tell us what precautions you suggest?—Personally, I should be inclined to say in reply to your question, yes. You must make them supply the unprofitable area.

1884. You would make the 95 per cent. pay for the other five?—Yes; the same as with electric lighting if they go into certain districts that do not pay them.

1885. Have you any figures with reference to the continental trunk line to Paris?—Yes. We were going to put them in, but we thought it advisable not to do so, because the circumstances are so different that you can hardly compare the one with the other without having all the details; we therefore preferred their being put in by experts.

1886. Do you make this No. 7 recommendation about the trunk line tariffs?—We strike that out altogether, please.

1887. It is here?—No. 7 is struck out altogether.

1888. It is in the copy I have?—Yes, I am sorry for it.

1889. I suppose I must not ask you any question

Mr. *Snape*—continued.

question about it, but I may ask whether it is your opinion that the trunk line charges proposed are excessive?—I should not like to give an opinion.

Mr. *Solicitor General.*

1890. You have spoken of the varying rates for limited services. Do you contemplate in that recommendation in the same area different grades (if I may use the expression) of subscribers, namely, one man who is able to telephone to the distance of one mile, another man who is able to telephone to the distance of two miles?—That is what was contemplated.

1891. For instance, suppose we take a suburb like Balham. You contemplate one set of subscribers who are only able to telephone as far as the local butcher?—Yes.

1892. And another set who are able to telephone further?—That is what was contemplated on account of the cost. We thought it could be done so much more cheaply not having an exchange; not having to pay of course for all the other wires it would pay all the small people to put it in.

1893. I quite follow that. Did you consider at all the inconvenience which would arise in the administration of service under those conditions?—I suppose it was present to the mind of everybody.

1894. But it was present to your mind and you did not discuss it?—We did not discuss it.

1895. But you, of course, see that there would be very serious inconveniences?—Certainly.

1896. There is another point I want to ask you about, that is, your third resolution, in which you deal with competition: you thoroughly appreciate, I see there, the difficulty that would arise in case of competition as to inter-communication between different systems?—Yes.

1897. That was, of course, a difficulty that at once presented itself to you?—We have had it discussed over and over again.

1898. And you have never been able to solve it, I suppose?—I do not know, there are such varying elements on the committee.

1899. If you have solved it I should like to know how you have done it. Have you done it yourself? Have you solved the difficulty?—The difficulty of what, sir?

1900. The difficulty which you allude to here in your third resolution, the difficulty of "inter-communication between different systems covering the same area." Have you solved the difficulty, because if you have I shall ask you how you have done it?—No.

1901. You have not?—No.

1902. Do you know anybody who has?—Well, I do not quite follow you, if you will excuse me.

1903. I will read it to you again: "That properly controlled competition should be encouraged, providing that inter-communication between different systems covering the same area can be satisfactorily arranged." Can you satisfactorily arrange this?—It is that inter-communication can be arranged in case you want it?

1904. Quite so?—You do that, of course, in the same way as the telephone company does it now, by inter-communication.

Mr. *Solicitor General*—continued.

1905. Do not you see that by competition those difficulties would increase; you say so yourself in the resolution?—Certainly they would be increased, but they would be under the regulation of the Postmaster General.

1906. The difficulties would increase in accordance with the increase of competition?—Certainly.

1907. Have you considered this question with a view to solving it?—No, I do not think I have.

*Chairman.*

1908. There is a resolution here referring to unprofitable areas?—Yes.

1909. "That in granting licenses precautions should be taken to avoid the neglect of telephone service in relatively unprofitable areas"?—Yes.

1910. Are you aware of applications having been made to the National Telephone Company to provide telephones, and those applications being refused in consequence of the area not being profitable?—No, I cannot say I have.

1911. You have no knowledge of that?—No. It was only in reference to any new schemes that we put this in.

1912. Not with reference to the existing system?—We did not contemplate that it was to apply to the existing system. It was put in in case any new company was started and they came to you for a license. We considered that you, as the guardian of the public, should see that the unprofitable areas were not left entirely out in the cold.

1913. Would not that result in any new company that received a license from the Postmaster General being very seriously handicapped in its competition with the National Telephone Company?—Not more so than the National Telephone Company is handicapped, because they must have unprofitable areas.

1914. I understand you to suggest that any new company receiving a license should be compelled, in providing a service within a district, to give it to unprofitable areas as well as to profitable areas; would not that be a regulation which would handicap that company as against the National Telephone Company, which is under no such restriction?—Perhaps you do not quite follow me. What I mean is this: supposing you granted a license for a certain district it should not be in the power of the company, having got the license, to only put up the telephone in the profitable part and leave the unprofitable part without a supply.

1915. Quite so?—It would not be within your power (at least you would not have authority to make them do it, because they might decline to take the license) to say, "You must take this part too."

1916. Now the National Telephone Company has a license with no such obligation, has it not?—Yes.

1917. If the Postmaster General were to grant a license to a new company with an obligation of such an onerous kind as that, would not it put the company under a serious disability as compared with the National Telephone Company?—Yes; but

*Chairman*—continued.

but with a smaller capital, no doubt, the new company would be able to compete even with that disadvantage; at any rate it is for them to consider if they take that district.

1918. You think that the advantage they would derive from their smaller capital would compensate for the increased obligation put upon them?—That was our opinion.

*Chairman*—continued.

1919. I understand you do not come here with reference to the municipal question?—Not at all. We do not wish to give an opinion about it.

1920. You express no opinion as to whether the municipalities should be granted licenses or not?—No.

Major S. Flood-Page, called in; and Examined.

*Chairman.*

1921. You are a director of the Edison and Swan United Electric Light Company, Limited?—Yes.

1922. And a member of the Sub Special Committee of the London Chamber of Commerce?—Yes.

1923. And I understand you come to support the resolutions which have been passed by the committee with the approval of the council?—That is so, sir.

1924. Without going over the evidence which has been already given by Sir Edward Carbutt, would you desire to make any further statement in support of these resolutions?—Perhaps it might be interesting to the Committee if I were to state the origin of our committee, and how it is composed, because it is rather a peculiar committee.

1925. I think we have had that?—Then I would say this, sir, that the first resolution that we have here would govern the whole of the others if acted upon, and that, with the exception of the second, the other resolutions are alternative to the first. I will state the view as I understand it, and I do my utmost to represent the view of the committee. These resolutions, sir, are matters of many hours thrashing out, and may be considered to be very much resolutions of compromise; we had very varying views.

1926. Do I understand that there was a good deal of divergence of opinion among the members of the council and the committee?—Of the committee; not the members of the council, but of the committee. There were very divergent views and *this* is the result of a great deal of discussion that was going on for very many hours.

1927. May we take it that that applies to each of these resolutions?—I think with the exception of the last, on which Sir Edward Carbutt has said that we are not going to give any evidence, and the fourth, I think there was very little difference of opinion on the fourth, and there was no difference of opinion on the seventh; but we are not come to give any evidence on the seventh, sir. As to the others, they were all matter of hard thrashing out to arrive at these conclusions.

1928. Sir Edward Carbutt has given us generally the views of the committee with reference to these resolutions; perhaps you will supplement that evidence shortly in any particular point?—If you will take the first, sir, I think the governing principle that we feel is that everything should be done by the State who own this monopoly; that the telephone has

*Chairman*—continued.

developed most enormously in the last 16 years, quite in proportion to any other branch of electrical work in this country; in point of fact, if we compare the progress the telephone has made in this country and other countries, and then compare the progress which electric traction has made, the telephone is far ahead of electric traction. The same may be said of electric lighting. We are very much behind other countries in our application of electricity; we are behind, not only as compared with America, but as compared with very many parts of Europe; and we think, as a commercial community, that the telephone during the next 16 years (I only take that period because it happens to be the period of the agreement, sir) will increase immensely; and we think the commercial community demands an increase of telephone service. I should say that in the "commercial community" I should include trading, small traders, all traders; and our view was that if that could be better secured by the State doing the work, then, as commercial men, we should approve of the State acquiring the telephones. The second resolution I will not say anything at all about, sir. The third was a matter of very much controversy, and it seems to me to come to this: The country owns this monopoly; the Post Office represents the country in that monopoly, and it is due to the commercial community that before competition is approved, there should be a due and adequate inquiry, as our view of the justification of competition is that the service can be better and more economically done. If it cannot be done better or more economically, then I should think we should not be in favour of competition. We make that the governing commercial principle.

1929. Then I understand the committee, and with the committee the council, have not expressed a decided view in favour of competition, but their approval of competition would be subject to those two considerations?—That was a matter of great controversy. This resolution was worded over and over again, and altered, and that is the resolution, sir, as you have expressed it. We think that if the Post Office authorities come to the conclusion after due and adequate inquiry, whether local or otherwise, that the public can be better and more economically served by a properly controlled competition that shall guarantee proper and satisfactory intercommunication, then, sir, as I understand, we entirely should approve of such control of competition. If it cannot be obtained we leave it where

*Chairman*—continued.

where it is, as far as I understand, the view of the Committee.

1930. And I understand the Committee are so complimentary to the Post Office that they are willing to leave the decision of that question to the judgment of the Department?—I would venture to say, specially speaking to you, sir, it was not so much this as that you are the representatives of the country. If it had been the Board of Trade, with great deference, I think we should have said to the Board of Trade (it is a public Department and represents the entire country), here is a body which, rightly or wrongly, has got the monopoly and the experience of what ought to be made the handmaid of commerce and trade of the most important character, which already is, and ought to be very much more so. Then, I presume, it would hardly be a matter of conflict that if there is going to be competition it is a matter of very great importance that standard regulations for the guidance of local authorities should be drawn, so that, at any rate, having competition, you may have the same kind of system at work all over the country; and those standard regulations should be drawn by a Government Department for the guidance of local authorities; so that people coming into this business should not find that they had one set of conditions in one place and a varying set of conditions in another, but that there should be standard regulations for the guidance of all local authorities.

1931. Which would apply to new companies, and not to the existing National Company?—You see, sir, Clause 2 we have not discussed in any way. If you will have the kindness to look at our resolutions, you will see we state that it would be useless and a waste of time discussing that which Parliament generally and the Chancellor of the Exchequer representing each side have said was a binding agreement.

1932. You have assumed that it is an existing agreement?—We have said that it would be useless, and a waste of time, occupying ourselves at all with it.

1933. But you do not suggest, do you, that standard regulations should be arbitrarily imposed upon the National Telephone Company, which at present has a license which lasts 17 years, without any such limitations or restrictions?—No; we have nothing whatever to do with the National Telephone Company in our view. All these are alternative to the Government acquiring the telephones; and we are supposing that competition is possible under the terms of Resolution 3; and if competition is permitted, then that 4 should stand.

1934. Have you anything further to say in addition to what Sir Edward Carbutt has said?—As to No. 5 (this is done very much), it is a matter of notoriety that there are varying rates for limited services here in London now. The Telephone Company will probably give evidence, but I think there are something like ten or a dozen places in the neighbourhood of London now (Kensington and Croydon I know to be two) where you have a different rate for the local service as against the rate which enables you to speak all over London. We think if there is going to be a competition this may be very much



*Chairman*—continued.

extended. As a matter of fact, some people probably use the telephone a hundred times more than others who are on it, and we think it would be quite possible to have various rates for limited services.

1935. As I understand you, you suggest that if competition with the National Company is introduced the Company might extend the system to limited services?—That is a matter, I presume, for them; they are already doing it; it is a matter of common knowledge. I was going to say, that in nearly the whole of the south of London you can do that; I am not quite sure whether it extends to the whole. Then, sir, with reference to unprofitable areas, I am sorry not quite to agree with my friend Sir Edward Carbutt in the view he has put before you. We have already said we should not have interfered in this matter at all if it were not for the fact that we think the commercial and trading community requires a very much greater extension of the telephone system than it has now. The honourable Member, Mr. Ellis, referred to the Electric Lighting Act, and that was very much certainly in my mind when this was passed. There are a number of men connected with electric lighting who are on that Committee, and the thought in my mind (and I thought that it was understood by most of us) was this: supposing, for instance, that a license was granted to a municipality, it ought to be used, we think, for the benefit of all the ratepayers, not only merely the larger commercial houses, but for everybody in their town.

1936. Everybody who is willing to pay the amount?—We were looking further than even "willing to pay the amount." If I remember right, when the telegraphs were originally acquired, one of the inducements held out to the country was that the companies had neglected unprofitable areas, but that when the Government took them up everyone would be able to telegraph wherever they lived. As a matter of fact, we know that guarantees are required in many places. Now what it was wanted, as I understand, to guard against, was this: if a municipality or a county council, or a company, had an area given to them, such an area should be given to them that when they got it they should not be allowed to pick and choose and say, "We will give to this part of the town a good telephonic service, and will not give any to the other." Whether it is to be done, instead of by subscription, sir, by a large accession of call stations, as in Switzerland, Belgium, and many other places, I do not know; but what we felt (and to my mind clearly) when we were discussing it was that there were two questions, the one with reference to county districts. We think that in any future license granted the districts should be so carved out, if they are carved out, that everybody in that district should have the best telephonic accommodation that could be given.

1937. I understand you mean that in the area for which the license is granted there should be a uniform system of telephonic service supplied to every applicant at a uniform price?—Not quite that, sir. I do not see how it would work to put them on the same telephonic facilities;

*Chairman*—continued.

but whether it would be done by a call station near to them, or in some other way, just as everybody can send a halfpenny postcard or a penny letter, so everyone who pays part of the rate in any place, whether under a county council or a town, should have the opportunity of using that for which the rate is paid; but if it were confined to the absolutely wealthier commercial class there would be a large number of people who would not get the benefit of it. At present it may be more or less of a luxury; it is becoming rapidly a commercial necessity. A great distinction has been drawn, I notice, between gas and water and the supply of telephones. For the moment it is so, but in the future we contemplate that the use of the telephone will be as widely spread, and come to be regarded as as great a necessity, as gas; I will not say water; and we understood in making these arrangements it was desirable that it should not be that a certain number of people who are called upon to pay part of the rate, or part of the risk (whatever it was), should be excluded, but that facilities should be given to the poorer portion of the population, and to the agricultural portion of the population.

1938. Facilities given, not in the form of a telephone in each man's own house, but that they should have a call station within their reach?—Of course a telephone in our own houses is to us all a certain comfort and a certain nuisance. I am not sure whether I would not rather have a telephone next door to me, that I could always go to, than in my own house. "The same facility"; does not that mean to us all the same facility for being able to use that which we are called upon to pay for partly in the rates.

1939. The facility of that No. 3 Resolution you allude to, do you not?—Our suggestion is, and I agree with it, that when the license is granted it should not be allowed to drop. It does not come in here, and I have no authority for the Chamber of Commerce to say a word upon that; but I am quite sure, if I had thought of it at the time, I should have asked to do so. No one should be able to take a license and drop it. We have suffered in that way in electric lighting very much from a number of municipalities and others who took electric-lighting Provisional Orders, and then did not do anything for years. There should come in the future an obligation on anyone who takes a license to carry that license out. The honourable Member referred to electric lighting. In Table "A" you had a certain time; in Table "B" you had another certain time. I would compel, in the case of a future license, anybody who took out the license to carry out the work.

Mr. *Snape.*

1940. In the recommendation, No. 3, you speak of inter-communication, if competition is allowed, between the systems; do you mean between the new systems to which licenses should be granted, and those only?—Wherever the system covered the same area.

1941. Not only where new licenses might be granted, but existing licenses?—I do not think that question was absolutely considered, except so far that we considered we had nothing whatever to do with the existing agreement. We did not discuss anything that would be an interference with the National Telephone Company. You will see by Clause 2, that we were excluded from so doing; therefore I should say it would apply to new licenses.

1942. If you did not discuss it, I suppose you did not form any views as to how that inter-communication could be arranged?—Indeed, no, sir. Our object was to bring before the Committee, resolutions which could stand being fired at and examined into. We, in a body like ours, are not engineers, and we are not competent to say how that can be done; a more difficult question probably has hardly ever been set for engineers to solve, and we have had no experience of that and have not discussed it.

1943. What did you mean by "inter-communication"?—Practically very nearly the same facilities, being able to get at the trunk wires, being able to communicate.

1944. That is not an engineering question?—Being able to communicate one with another. If you are in one area, sir, and I am in another, and we pay to different places, I think there should be inter-communication, so that if I wished to speak to you I could.

1945. You have no suggestion to make as to how that can be accomplished?—No, none.

1946. It is not an engineering question; there is no engineering difficulty about it; it is a question of competing companies allowing each other to use their systems?—In my view, sir, being somewhat familiar with large exchanges, though not in England, I venture to think there is a good deal of engineering question involved.

1947. The purpose of my question was not any engineering difficulty, but the question of difficulties between two competing companies allowing each other to use their lines?—I think if you look at the end of our resolution you will see that we have hardly had the same view as yourself, because we say that this competition should be granted after due and adequate inquiry, that the public can be better and more economically served. In that surely the engineering question comes very materially in in our resolution, sir.

Sir *Charles Cameron.*

1948. You are well up in telephony, are you not?—No, sir; I have never had anything to do with it.

1949. You have mentioned these exchanges of Croydon and Kensington?—Yes.

1950. And you said there were seven or eight more?—So I am informed.

1951. You cannot give us any information beyond that?—No, I said I thought the telephone company would give evidence upon that; but it is a matter of common notoriety, I think I said.

Mr. H. MONTAGUE BATES, called in; and Examined.

*Chairman.*

1952. I BELIEVE you are the principal clerk to the Commissioners of Sewers of the City of London?—I am.

1953. How many years have you had experience of telephones?—Eleven years.

1954. In your capacity as principal clerk?—No, in my capacity in the office. I have only been principal clerk for the last month. I have been in the office for 20 years previously.

1955. And during eleven of those years you have had experience of the working of the telephones?—I have.

1956. Will you state to what extent?—Those telephones with which I have had experience are, one on the Exchange and three private wires to our depôts.

1957. Have you used them personally?—Yes.

1958. And what opinion do you wish to express with regard to the efficiency of the system?—From my experience I think the service is very inadequate. In the first place, when you wish to get into communication with a subscriber there is very often a great deal of delay. Then, again, in the second place, after waiting patiently for some time you are told that the line is engaged and that you must ring up again at some future time. My opinion is that that obligation to ring up again should rest with the exchange, as you very often do ring up again and then find the line still blocked. Besides this much annoyance is caused by being repeatedly rung up by mistake, by the line, I presume, getting crossed in some way; and then by errors in being put on to people that you do not wish to speak to.

1959. Is this evidence derived from your own experience?—Yes, this is evidence derived from my own experience, as representing the Commissioners of Sewers as telephone users through me.

1960. Have you complained to the company?—Yes, I have complained personally very often to the Exchange; but when the complaint gets a little strong, they being masters of the situation, you are cut off; you very seldom can finish the complaint; but of course one has always felt that it is not entirely the fault of the people at the Exchange; the opinion generally is that the system is fundamentally wrong and that the defects are caused to a great extent by reasons over which the Exchange people have no control.

1961. What are those reasons?—The reasons are these, that you cannot hear distinctly; sometimes you cannot hear at all; at other times there is a buzzing sound which drowns the voice of the person you are speaking to, and you are constantly cut off in the middle of a conversation.

1962. I understood you to say there were reasons over which the Exchange had no control?—I believe it is more the system than anything else that is at fault.

1963. You mean the single wire system?—Yes, the single wire system.

1964. Have you anything else to state with regard to the general question of efficiency?—As regards efficiency, no. I think I have detailed generally the complaints, and those complaints which I have made frequently are the experience of every acquaintance of mine who has used the telephone; and I could produce here, if the Committee would allow it, the evidence of a great number of people to that effect.

*Chairman*—continued.

1965. Then do you wish to make any further statement?—I should like to draw your attention as regards efficiency to Mr. Forbes' evidence, the chairman of the National Telephone Company.

1966. I think we have heard that already; we have had it before us to-day?—I think that shows that the single wire system is inefficient altogether; and then I should like to draw your attention to the Treasury Minute of 1892.

1967. That we have before us?—That seems to me to be evidence that the Government thought the single wire system was quite inefficient, and that they would not consent to any other system unless it was the twin wire or metallic circuit.

1968. Then you were going to say something about the cost?—I have compared the cost in London with the charges in other cities and towns, and it seems to me to be very high indeed.

1969. I think we have heard a great deal of evidence upon that point?—I am entirely in your hands.

1970. I think any repetition of figures we need not have?—At all events, I may say that the Commissioners of Sewers still have before them an application for their consent to a proposal made in 1893 to apply to the Postmaster General for a licence to establish a first-class double-wire telephone service at a maximum charge of 8*l.* per user per annum, and also to show the view the Commission had with regard to the price the telephone should be supplied at, they resolved to consent to certain tubes which had been laid by the City of London Electric Lighting Company being used for telephonic purposes on a guarantee being given that telephones with double wires, and all the latest improvements, will be supplied to the citizens at a cost not exceeding 8*l.* per annum. I may say that up to the present time the guarantee has not been forthcoming; but it shows what the feeling of the Commissioners of Sewers was as to price.

1971. May I ask who were the applicants for that?—The proposal for a double-wire system at 8*l.* per annum came from Mr. H. S. Foster, a Member of Parliament.

1972. You have heard nothing more of that proposal?—No, nothing since. It rests with the Commission now. That offer has been made; they have not accepted the offer.

1973. The Commission have made a certain proposal?—No, they have made no further proposal. The whole matter has been in abeyance pending negotiation with the City of London Electric Lighting Company for the use of the tubes, and that is still before them; therefore no further communication was required from Mr. Forster; he is waiting for some communication from the Commission. On the 19th of last March the

*Chairman*—continued.

Commissioners empowered the Streets Committee to give evidence on behalf of the Commission to this Committee, and subsequently, on the 26th March, the Streets Committee passed the following resolution: "That, in the opinion of this committee, the provision now made for the telephone service in the City of London is inadequate, and that telephones should be supplied at a rental not exceeding 10*l.* per annum." They came to that decision about the price by having compared the charges made in different cities and towns in the United Kingdom, and also charges for telephones in foreign countries, and they thought that if the telephones could be supplied at a rental of 10*l.* it would be a fair price.

1974. But it was not based upon any actual investigation or expert evidence?—None whatever; simply on statistics from other places and countries.

Sir *Charles Cameron.*

1975. Are you in favour of taking powers yourselves to work telephones?—The Commission have not expressed any opinion about that. Their only interest is to get efficient telephones as cheaply as possible for the people they represent.

1976. Have they expressed any opinion as to competition?—No, no opinion whatever.

1977. Then, what steps do they propose to take to get these telephones?—At the present time there are a series of tubes laid by the City of London Electric Lighting Company, which cannot be used without the consent of the Commissioners, who think that is a power they ought to retain, because they should get some *quid pro quo* for giving their consent, and they hope by that means to keep the price of telephones at a moderate amount.

1978. Then they contemplate that the National Telephone Company will take the use of these tubes, do they?—They do not know. We are negotiating with the City of London Electric Lighting Company; they are the people with whom we are negotiating.

1979. And do you know how the City of London Electric Lighting Company came to have those tubes?—Yes; they laid them while they were laying their tubes for electric lighting purposes, unknown to the Commissioners.

1980. You do not know what induced them to do that, do you?—Yes; I presume they ascertained by some means what was going to take place with regard to the future of telephones, and in anticipation of permission being granted by the Commissioners they entered into an agreement for leasing these tubes to the New Telephone Company. They laid them in anticipation of that agreement.

1981. Agreement with the National Telephone Company?—Yes; a lease to the New Telephone Company, and then to the National Telephone Company. They leased them to the New Telephone Company, who leased them to the National Telephone Company.

1982. They leased them to the New Telephone Company?—Yes.

1983. Would you require Parliamentary powers to grant permission for the use of these tubes, or have you the power?—Under the Telegraph Act of 1892, the local authority has power to grant to any company who has tubes for electric-lighting purposes power to use some of them for telephonic purposes.

Sir *Charles Cameron*—continued.

1984. Supposing that the New Telephone Company had not been bought up, was still in existence, and was fulfilling the terms with which it started, and supplying a good and very cheap telephonic service to London, and it gave you a *quid pro quo*, I suppose you would at once allow it to use these tubes, subject to the contract it had made with the electric-lighting company?—I cannot say that officially; I cannot say what the Commissioners would do, but I should think they would do it.

1985. That is their policy?—That is their idea; their only idea is to obtain a cheap and efficient service of telephones.

1986. That being their policy, we are talking of a hypothetical case that cannot arise; but upon the hypothetical case, if it had not been for the absorption, or the liquidation, of the new Telephone Company these tubes might have been utilised for the purpose of providing a good underground telephone service?—Not without the consent of the Commissioners.

1987. With the consent of the Commissioners, of course. We recognise at once that the local authority has the veto in all cases; but in pursuance of the policy you describe of the Commissioners of Sewers that is what would happen?—Many questions are involved before that consent could have been given; because, in the first place, the tubes were laid surreptitiously, without the knowledge of the Commissioners at all.

1988. Assuming all that?—I cannot say anything as to what the Commission would do, but I should say, hypothetically, that they would consent.

1989. You have told us the policy of the Commissioners?—Yes.

1990. In pursuance of that policy that is what would probably happen?—I should think so.

*Chairman.*

1991. You said the Commissioners could grant the use of these tubes for telephone wires; that is subject to the sanction of the Board of Trade, is it not, and also of the Postmaster General?—Certainly.

1992. And, of course, you express no opinion as to whether these tubes are laid in a suitable direction for telephone purposes?—No, none; none whatever.

1993. Or whether the tubes themselves are suitable?—None; not the slightest; that has never been before the Commissioners. The only question has been as to the terms on which they would allow the City of London Electric Lighting Company to let the Telephone Company use them.

Sir *Charles Cameron.*

1994. You say the only question is the terms upon which they would allow the Electric Lighting Company to use them. Have you got the terms?—The offer of the City of London Electric Lighting Company of the 22nd June 1894 was to pay to the Commissioners "10 per cent.

Sir *Charles Cameron*—continued.

cent. of any annual rental, so long as such may be received, for the use of any tubes for telephonic purposes, up to a sum of 10,000*l.* per annum, and 20 per cent. on any rental in excess of 10,000*l.*, provided the minimum amount to be received by the Commissioners is 1,000*l.* per annum."

1995. Was that a resolution by the Commissioners?—No; I will just refer to the exact proceedings. On the 25th of July 1893, the Commissioners "resolved to consent to certain tubes laid by the City of London Electric Lighting Company being used for telephonic purposes, on a guarantee being given that telephones with double wires and all the latest improvements will be supplied to the citizens at a cost not exceeding 8*l.* per annum." But this guarantee was not forthcoming. The proposed annual money payment emanated from the City of London Electric Lighting Company.

Sir *Charles Cameron*—continued.

Captain *Bagot.*

1996. Can you say in what year those tubes were laid by the Electric Lighting Company?—They were laid in 1891 and 1892, I think.

*Tuesday, 30th April* 1895.

MEMBERS PRESENT:

Mr. Benn.
Mr. John Ellis.
Sir James Fergusson.
Sir John Gorst.
Mr. Grant Lawson.
Mr. Arnold Morley.
Mr. Snape.
Mr. Solicitor General.

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Mr. GEORGE BERRIDGE, called in; and Examined.

*Chairman.*

1997. YOU are the Chairman of the Street Committee of the Commissioners of Sewers of the City of London?—I am.

1998. And I believe you are in business in London?—Yes.

1999. Have you had considerable experience of the telephone?—Upwards of 12 years I have had it in my premises.

2000. From the National Telephone Company?—From the National Telephone Company; yes.

2001. What has been the result of your experience with regard to the efficiency of the service?—Well, I think it is very inefficient. If we require to get on for any special purpose there is generally some delay; and very frequently when we do get on to the exchange we are told that the line is blocked. Notably within the last few days that has happened. Twice within 10 minutes on the same line I was told that it was engaged. Then very frequently we can hear other people speaking more clearly sometimes than the person we are supposed to be in communication with. Then we are frequently rung up when we are not required, for some reason or other. I suppose the lines are in contact, or something.

2002. When you say within the last few days, what do you mean?—Within the last few days we wished to get through to the same people for a special purpose, and within 10 minutes we rung up twice, and each time we were told the line was engaged; so we ultimately had to send a messenger.

2003. Would that mean more than that the person with whom you wished to communicate was engaged with somebody else?—No, that is not so; they were not engaged with somebody else; the line was engaged. I suppose they have only one line or two lines, from a particular exchange to the other exchange. It was only from Thames-street to Shoe-lane that we wished to "get on."

2004. How far is that in distance?—I suppose about three-quarters of a mile.

2005. Did you learn from the company what the difficulty was in getting what we call a junction wire?—No; we were merely told that the line was engaged.

*Chairman*—continued.

2006. Their line?—We were told that the line was engaged.

2007. Has that been your general experience?—Well, it very frequently happens, very frequently; and yesterday only, twice within an hour, we were rung up and not required. Whether that was due to the mistake of the operator, or whether the line was in contact, I cannot say.

2008. You have one telephone, have you?—One.

2009. What do you pay for that?—I paid 20*l.* a year until within the last year; then I got it on an agreement for five years at 17*l.* a year. I use it for business purposes only. If I had required it for my private house I should have had to pay an extra 12*l.* for a private one.

2010. If you had an additional wire?—If I had an additional wire they would charge me 12*l.* If I had a private wire, so that I could communicate with my private house, they would want 12*l.* a year extra.

2011. That is to say, they would have charged you 17*l.* for your business telephone, and given you a house telephone for 12*l.*?—I do not know. I should think probably they would have made a slight reduction, 15 per cent.; but it used to be 20*l.* and 12*l.*, making 32*l.* Of course, they would not put you a telephone on for private purposes unless you had one for business purposes as well.

2012. They give you one on payment of 12*l.* on a five years' agreement?—No, it is 17*l.* on a five years' agreement, and I suppose it would be 12*l.*, less 15 per cent., if I wanted it for my private house.

2013. Well, 10*l.*, say?—Probably.

2014. I believe the private house telephone which the company provide is independent of the district in which that telephone is?—Oh, yes.

2015. Where is your own private house?—Sydenham.

2016. So that if you had had a telephone in your

*Chairman*—continued.

your private house you would have had it for the 12*l.*, less 15 per cent.?—I suppose so.

2017. Which would have enabled you to communicate from Sydenham to your office in the City?—Yes.

2018. And with all other subscribers in this large area, 630 square miles?—Yes; but we are bound to have the two, the business and the private as well.

2019. I do not think that is so, but the company, of course, will state their arrangement about it?—Well, I must say I have never been told that I might have a private telephone for my private house at 12*l.* alone; I have always been told that it must be in addition to the business one, so that we would have had to pay 32*l.*

2020. What is your notion of the charges?—I think they are most excessive; we are paying the same price now as we did 12 years ago; we pay at the same rate now as we did 12 years ago, in spite of all the improvements; and the New Telephone Company, you know, agreed to supply for 13*l.* per year as against the National Telephone Company's 20*l.*

2021. They did not actually supply, did they?—No, because the National Telephone Company, in their wisdom, bought them up, as they have done generally with any opponents; no fair competition has ever gone on.

2022. I am told that the 10*l.* for the private house telephone is quite independent of the business telephone?—Well, I think that is something new. I never intended having it so. I did not obtain the particulars; but I know I was told 12 or 16 years ago what I am stating now.

2023. You are speaking of some 12 or 16 years ago: are you aware that the greater the number of subscribers the greater the cost to the company; that the company are therefore entitled to charge a higher rate?—I think the greater the number the less should be the cost. When a man increases his business he expects to get increased profit, and does so naturally.

2024. You have no experience of the technical difficulties of working the telephone, I suppose?—Oh, no; I am not an engineer.

2025. We shall hear all about that matter from the company themselves. You have spoken as a private telephone subscriber; have you any evidence to give on behalf of the Commissioners of Sewers?—No; only that the Commissioners of Sewers are very anxious to have a very good service, and that the user should have it at a reasonable rate. A resolution was passed in our committee to the effect that they thought 10*l.* would be a reasonable rate. That was in connection with allowing them to use the tubes surreptitiously laid by the Electric Lighting Company, which were then leased to the New Telephone Company, and subsequently transferred to the National.

2026. You are not aware yourself, I suppose, whether these tubes are suitable for telephone purposes?—That I cannot say. I suppose they have been laid with that idea by experts.

2027. Or whether the positions of the tubes and the direction of the tubes are suitable for exchange purposes?—That is not within my knowledge one way or the other.

*Chairman*—continued.

2028. Are the Commissioners of Sewers contemplating having a telephone system of their own, and asking for a licence?—I believe not; but they certainly think that they ought to have the right to ask for one, and that every municipality should have that right, for this reason: as they are the authorities who can give permission for the opening of the streets to lay the tubes, it is the only means they have of checking the extreme cost the company might charge; because they may, for that reason, make terms with them before allowing them to open the streets for the purpose of laying down the tubes.

2029. You have that power now?—We have that power now; and we think it absolutely essential that the power should be retained, and that Parliament should not take it away; we think that all municipalities should have that power.

2030. That is to say, that the veto of the local authority over the streets should be maintained to the full extent?—Undoubtedly.

2031. But you say you think they should have the right to have a licence if they ask for one?—My own personal opinion is that I would prefer the Government to take over the whole thing; still, I think municipalities should have the right under the circumstances.

2032. Would you contemplate with satisfaction the Commissioners of Sewers, that is to say, the Corporation of London, having a telephone licence for carrying on telephone business in the City, and the London County Council having a telephone licence for carrying on business outside the City?—In their own particular districts I see no reason why not.

2033. You do not think there would be difficulty and danger from competing systems in areas such as the City and outside the City of London?—No, because I suppose some arrangement would be come to, like arrangements are come to between great railway companies when they give a right of way over their lines. Of course, I am not an expert in that sort of thing; it is only a personal opinion.

2034. Have you any further statement to make with regard to these tubes which were laid by the Electric Lighting Company?—Communication is going on between the Commissioners of Sewers and the Electric Lighting Company as to the use of these tubes, and we are negotiating as to the terms upon which they should be used. The Commissioners think that some benefit should accrue to the users, and probably also to the taxpayer.

2035. But no arrangement has been come to with regard to them?—Not at present; negotiations are still pending.

2036. Is that with Mr. Foster?—No. Mr. Foster offered, if we could get the Post Office to give him a licence, to introduce a company which would give the users of the telephone a good service for 8*l.* per annum. Of course no decision could be come to in that respect while these other matters were pending.

Sir *James Fergusson.*

2037. I think the Commissioners have circulated a statement, have they not, of a scheme by which

Sir *James Fergusson*—continued.

which it was expected to give the service for a subscription fixed at 8*l.*; is not that so?—Oh, no.

2038. They have not circulated such a statement?—No, they have not, I am sure. I know Mr. Foster wrote a letter offering a scheme, and no decision has been come to upon that point.

*Chairman.*

2039. The Commissioners of Sewers are the road authority in the City, are they not?—They are.

2040. And have the control of the streets?—Yes, they have.

Sir *James Fergusson.*

2041. Have you any personal experience of a superior system of telephoning?—None at all.

2042. May it not be that an interruption in the line, say for 10 minutes, is incidental to any system?—Certainly; but in the case I am speaking of there was no interruption; they distinctly said the line was engaged, was in use practically.

2043. We probably mean the same thing?—Yes.

2044. It was occupied?—Occupied by some others, I suppose.

2045–8. Do not you think that would be incidental to any possible system in a crowded city?—It may be. Of course I have had experience of great interruptions; for instance, a few years ago, when we were without a telephone for a month or two in consequence of a snowstorm.

2049. That would be incidental to any overhead system?—Undoubtedly, yes.

Mr. *Snape.*

2050. Mr. Montague Bates told us that a guarantee had been given by the company that proposed to construct a system at a charge of 8*l.* per user per annum. You would have made arrangements with that company for that purpose, if that guarantee had been given; you would have given facilities?—No; Mr. Foster made that offer, but as we were then negotiating with the other company nothing was done; a mere formal reply was sent to him upon the subject.

2051. Mr. Bates says in his evidence it was because the guarantee was not given that you did not go on?—I think not. I took a great interest in the telephone question at the time, and I think if that had been the cause I should have remembered it. I think that must have been a little misunderstanding. Mr. Bates could not have quite understood the question. No guarantee was given because it was not asked for. Mr. Foster offered to start a company that would guarantee to telephone users a telephone service at 8*l.* per annum; but no guarantee was asked for because nothing further was done in the matter.

2052. Had the Commissioners reason to suppose the service could be supplied at 8*l.* per annum?—I should think there is no doubt about it, with a company starting on a fair basis, not having the capital watered as this has been.

Mr. *Benn.*

2053. You have told us as to your experience with regard to the telephone?—Yes.

2054. You have a good many friends in the City who also use the telephone?—Yes; their experience is much the same. On Friday Mr. Deputy Pym was here to give evidence; he is a member of the Court of Common Council and deputy alderman of the Ward of Queenhithe. He was so disgusted with the way it was used that he threw it up altogether, and requested the company to remove it, and then they made an unconditional offer to let him have it for 17*l.* instead of 20*l.* a year; and he considered that his business suffered very much from the way it was treated in getting imperfect messages.

2055. Can you tell the Committee anything about the circumstances of the New Telephone Company in this respect; I believe that within a very short time they secured a considerable number of subscribers?—They did; I was one among the number.

2056. You were one?—Yes.

2057. Then you were prepared to put up with the inconvenience of a rival system?—Yes; I felt quite confident that they would soon have the bulk of the subscribers; people would not pay 20*l.* a year for what they could get for 13*l.*

2058. I think in addition to the reduction in price, the New Telephone Company offered you a better system: the double-wire system?—Yes.

2059. That was one of the conditions?—It was.

2060. Do you consider it a grievance that this better system, a better system and a lower price, was cleared out of the way by amalgamation?—I think it was a great disadvantage.

2061. You regard it as a grievance?—Yes, rather.

2062. You know probably the proportion of business in London which may be described as local business?—Yes.

2063. And the proportion which may be described as trunk-wire business?—Just so.

2064. Supposing the City to join hands with the County Council, as they have done in this matter, and a system was devised quite independently of the trunk-wire system for the convenience of the local demands of London, do you think the citizens would be quite prepared to put up with the inconvenience of having two systems in order to secure a good local service at a lower price and a double-wire system?—Yes, I think there is no doubt about it. Of my own business 90 per cent. at least is within the area of the City.

2065. Then I may take it from you that while you recognise the advantages of the extension of the trunk-wire service system, you think London should not suffer with regard to its local service?—Certainly.

2066. In this matter the City have joined hands with the County Council in order to bring about this inquiry, have they not?—Yes.

2067. Can

Mr. *John Ellis.*

2067. Can you give us the population of the area over which you are the street authority?—Do you mean the sleeping population or the daily population; because the daily population, that is to say, people who come in to work, would be, I suppose, somewhere over 300,000 people?

2068. I will take both; I am anxious for information?—The sleeping population is just over 20,000, I think; that is how we are represented in the House of Commons; I think it is a most scandalous thing.

2069. Can you give the figure of the day population?—That is over 300,000; for instance, at my own places we have a large number of people at work, and at night there is nothing there but the cat.

2070. Can you give us any idea of the subscribers for the use of the telephone out of that population?—No, I cannot tell you that; but I should say the great bulk of them have businesses in the City.

2071. I do not know whether you quite follow my question: can you give me the number of subscribers out of that day population of 300,000?—I cannot tell you the number, of course.

2072. That is what I want?—I cannot tell you the numbers.

2073. Your body, the Commissioners of Sewers, have not informed themselves as to how many subscribers there are within their area; that is my question?—I believe not.

2074. Have you that figure given to you now in the paper which has just been handed to you?—No; this is just merely correcting my statement about the numbers. About 30,000 is the number of the night population, and 378,000 the day.

2075. Then have your Commissioners taken any steps to ascertain approximately the number of complaints, say within a month or a week, of imperfections in the service?—Well, I do not see how they could get them; they could only do it by inquiry of the National Telephone Company; and I do not suppose they keep a black book, out of which they would inform us, would they?—Scarcely.

2076. You have not invited them to do so?—No; I could bring you up any quantity of my friends.

2077. I want to get at the facts?—In my own experience, of people I communicate with, I could certainly bring you up 20 witnesses who would say as I say.

2078. And you think your colleagues would be in a similar position, that each of them could produce another 20 persons?—Possibly.

2079. You think those persons who, if we were inclined to call them, would come into this Committee Room with complaints of the telephone in your area might be numbered by scores, if not hundreds?—Yes, certainly.

2080. That is from your own personal experience?—My own personal experience.

2081. Therefore, I presume, that it being a matter of notoriety, your body have not thought it necessary to take any formal evidence, or invite any formal complaint upon the subject?—That is so.

Mr. *John Ellis*—continued.

2082. Would you wish us to infer that the service is getting worse, that it is standing still, or that it is improving?—It is not improving; I should say it is standing still.

2083. Then these complaints have not had the effect of in any way remedying the imperfection?—No. I do not say that the people have lodged the complaints; for instance, one frequently gets a memorandum, "been trying to get through to you on the telephone."

2084. Still, as a matter of ordinary experience, you know: If one has complaints of a railway service, traders send on complaints to the company; I presume these complaints have found their way to the telephone company in the same way?—I think very frequently you are apt to complain through the telephones at the time, and then you find yourself very quickly cut off.

2085. Do not people sit down and write a letter, and say, "I am paying so much per annum, and do not get value received for it"?—I am afraid they do not; oh, no.

2086. Do you mean to say that they go on paying?—I have written letters myself, but only very occasionally.

2087. Are they willing in the City of London to go on paying so much per annum for an instrument that is so defective?—I do not say the instrument is useless (there is no question about its value), but I say it is not so perfect as it should be; I should be very sorry to be without it.

2088. It is good, but it might be better?—Undoubtedly.

2089. Then I want to get one other answer from you: are you in agreement with the last witness, Mr. Bates, in his reply to Questions 1975 and 1976, when he said, "The Commissioners have not expressed any opinion about" taking powers to work the telephones or about competition?—Yes, I am quite in accord with his evidence.

*Chairman.*

2090. You made a statement on your own behalf about competition; you said you would approve of a new system at a cheaper rate being sanctioned in London?—Yes.

2091. For the City especially?—Yes, for the City.

2092. Do not you think it would lead to difficulties if some of the merchants in the City were on the National Telephone Company's system and some on the new system?—I think difficulties are only things to be surmounted. I think men connected with that sort of thing would soon find their way out of any difficulty that might arise from it.

2093. Still, you think there would be difficulties arising from half the merchants being on one system and half on the other, and unable to communicate one with the other except by arrangement between the two systems?—I think in some cases you would find them become subscribers to both. My idea is that some arrangement should be made by which they might have way-leave.

2094. Two subscriptions would not lead to economy, or a cheaper service?—Certainly not; it is not economy that is always the case; it is

*Chairman*—continued.

speed; it is of the utmost importance sometimes that you get your answers immediately.

2095. If you wished to communicate with a correspondent on the other system would not that lead to delay rather than speed, if you had to go through another exchange?—I do not see why it should; it is a mere case of switching on, which cannot take long.

2096. But you have no technical knowledge of the subject?—Oh, no; my theories may be altogether wrong; I am only speaking of what I think would be best for the users of the telephone.

2097. Would the Commissioners of Sewers in the City of London, if a licence were granted to the London County Council, be willing to give the London County Council control over their streets in the City?—I should say decidedly not; for my own part, I should say decidedly not.

2098. Therefore, the licence to the London County Council for carrying on telephone business, so far as the City was concerned, would not do away with the difficulty of way-leaves?—I should say not; no. I should not be certainly a consenting party to giving the London County Council any control over the streets of the City of London, but I should be very willing to see the Post Office take it in hand themselves; I think that is very much the best way out of the difficulty.

2099. I may take it that the City would be opposed to the London County Council having a telephone system which would extend over the City, so far as the way-leave question was concerned?—I do not think so; I am only speaking personally; I have no right to speak in the name of the Corporation on such a thing as that, but I do not think they are at all inclined to play the part of the dog in the manger; way-leaves they would not object to, I do not suppose.

2100. You think they would be prepared to grant way-leaves, but not the right to open the streets?—I cannot say; that is a question which we have not gone into.

Sir *James Fergusson.*

2101. The Chairman has asked you about competing systems as regards user; but have you considered whether the introduction of competing systems into the area of the City would not be very inconvenient, either from the mixture of wires or the taking up of the streets?—Yes, there is no doubt it would be inconvenient at the first going off. I take it that now new lines would have to go underground, and not overhead.

2102. Is it not the case that the streets of the City have already almost as many pipes under them as you could find room for?—Yes; but there is no reason why they could not go deeper. You see, the pipes that are laid now are pretty close to the surface.

2103. You think there is no insurmountable obstacle?—Oh, I should think not.

Mr. John Archibald Dow, called in; and examined.

*Chairman.*

2104. You are a Coal Master in Glasgow?—Yes, I am.

2105. You are also a partner in the Hamilton Colliery Company?—That is so.

2106. And a director of the Cambuslang Coal Company?—Yes.

2107. Have you had experience of the telephone service in Glasgow?—I have had nearly eleven years' experience of it.

2108. In connection with those businesses?—Quite so.

2109. Do you use the telephone yourself much?—Personally, I have used it constantly; in fact, I have almost lived on the telephone in business hours; we use it very much indeed.

2110. That would be from 10 o'clock in the morning, till what hour at night?—Five, six, or seven.

2111. Six, or seven at night. Now, during those 11 years, what has been your experience of the working of the system supplied by the National Telephone Company in Glasgow?—Take it year in and year out, I have found it a very good service. Of course, there are breakdowns and dislocations taking place now and again; I do not deny that; but I have always found the company very smart in doing the repairs and putting the damage right; but, taking it all over, through and through, it is a fairly good service. I do not suppose I could get a better from any other company. I do not look for it.

*Chairman*—continued.

2112. The area of the district over which the National in Glasgow has the control for telephone purposes at the present time is considerably larger than the city area of Glasgow? Yes, it is so.

2113. Do you consider that an advantage?—Well, it is an advantage to the like of us who have collieries away from Glasgow; perhaps 10 or 12 miles, outside the municipal boundaries altogether.

2114. Because it enables you to communicate directly without the interposing of another exchange between your offices and your collieries?—Exactly so.

2115. What is your opinion of the application from the Corporation for a licence to carry on telephone business within the area of the City?—I should not like to see the application granted, from this standpoint: that it would mean that we would require to join two exchanges; instead of a reduced rate, we might have to pay a double rental; we might have that pleasure; and there is this difficulty, too: seeing that our telephone connections are outside the boundaries altogether it would rather be against us, because we would have a restricted service inside the municipal boundary; and, for instance, if I wished to speak, Greenock, Paisley, or Hamilton, all these other boroughs

*Chairman*—continued.

boroughs and cities would require to apply for a licence to put up telephone circuits for themselves, and in speaking through those it would be one eternal nuisance for us it would be a retrograde step altogether; it is a cutting down instead of a building up. I would rather see it go into the hands of the Government altogether, because it is a backward movement in my opinion.

2116. Are you speaking generally of municipal licences?—I am only speaking about the telephone licence.

2117. But municipal telephones; you are applying that remark to municipal telephones only?—To municipal telephones only.

2118. Would you consider it retrograde?—I would.

2119. And in the event of difficulties in getting through to a correspondent, do you think the difficulty would be increased?—We would be knocked about like a shuttlecock. At present, if there is any complaint to make, I go to the head office at once, whereas, if I had three or four different exchanges to complain to when any wrong connection or fault took place I would really be shuttlecocked between them, the one most likely blaming the other.

2120. Whereas now you know it is the National Telephone Company if there is anything to complain of?—I can go right to the head office at once and complain, and get satisfaction.

2121. What is your price at Glasgow?—£10.

2122. What is your opinion with regard to the price, and the service which it offers?—I say we get good value for our money; still, all the same, if any reduction could be made, as a business man, I would welcome it, provided it was coupled with efficiency; I do not want cheapness and inefficiency, or a restricted service.

2123. But you consider the present system an efficient service under all the circumstances of the case?—On the whole I consider it an efficient service. I may say that we have about ten or twelve instruments, and we pay a rental of nearly a hundred pounds a year; fully that.

2124. Ten or twelve instruments in connection with your various collieries and businesses?—Yes.

2125. You are not a shareholder, I believe, or connected in any way with the Telephone Company?—Unfortunately I have no shares in the company.

Mr. *John Ellis.*

2126. I understand you come here as an individual user of the telephone?—Yes.

2127. You do not speak as a representative of any public body?—No.

2128. Do you think your evidence would be corroborated by any of your friends?—I have no doubt I could have brought a great many to corroborate that.

Mr. *Benn.*

2129. You come at the request of the National Telephone Company, do not you?—Exactly so.

2130. You have told us that your fear is that, if Glasgow secured a licence for its municipal



Mr. *Benn*—continued.

area, you might, being outside the municipal radius, have to pay an additional rate?—It looks very like it; unless there was some arrangement made.

2131. So to protect yourself against any such catastrophe, you are an opponent of the municipal licence?—That is about the position.

2132. But suppose the citizens within the area of Glasgow with a system of their own were able to get a local telephone service for half the 10*l.*, for 5*l.*, a similar price to that which obtains in other places, do not you think it is rather a hardship upon your friends in Glasgow that you should try to deprive them of such an opportunity?—I only look at it from one standpoint. I do not see that there is room for two companies just now in Glasgow. With the present company we are thoroughly satisfied; I am here to speak personally from my own experience.

2133. You speak as one of those outside the municipal ring?—Exactly.

2134. In the interest of those only?—Exactly.

2135. Now suppose a system existed in Glasgow under a municipal licence, and an arrangement were made whereby you would get continuous service, and the difficulties you apprehend were avoided, it appears to me your objection would disappear?—Well, of course, that remains to be tried; we can only speak from the experience we have had.

2136. True; but there is plenty of expert experience not only with regard to this country, but other countries?—I am not an expert on that point; I can only speak of experience with the National Telephone Company.

2137. You say you have been fairly well served, and your fear is that, if this arrangement were brought about of a municipal licence, you might have to pay double?—Yes.

2138. Your fear of having to pay double causes you to come here against the wishes of Glasgow?—Yes, that is so. Excuse me, "against the wishes of Glasgow." I do not know if you can put it in that way.

2139. Against the wishes of Glasgow as expressed through its representative body?—I do not know of any public meeting that has been called, or anything of that nature.

2140. No, but you know quite well that the Glasgow Corporation have had a telephone committee for a long time; and it was largely owing to the representations of that committee that this inquiry is being held; so that I may claim that the desire for a licence may be described as "the wish of Glasgow"?—It may be.

Mr. *Grant Lawson.*

2141. I only want to clear up one point; Mr. Benn asked you if you were outside the municipal boundary; I suppose your central office is inside?—Yes, it is in the centre of Glasgow.

2142. You merely wish to speak to your collieries outside?—Yes; and to subscribers perhaps over a trunk wire, at Greenock, at Paisley, at Aberdeen, and other places.

2143. I suppose the people of Glasgow have

Mr. *Grant Lawson*—continued.

to communicate with people outside Glasgow the same as yourself?—Oh yes, very often.

Mr. *Snape.*

2144. Would not the trunk-wire communication be accorded if other municipalities established systems of their own, would there not be reciprocal action between them?—I cannot speak as to that.

2145. Have you any reason to suppose they would prevent each other taking advantage of such things as inter-communication?—I really cannot say; that is a matter, of course, which would have to be arranged.

2146. You have expressed the opinion that this inter-communication would fail you if these municipalities had the licence granted to them; why should you think it would not continue?—Because instead of one company, as at present, we would have so many companies to deal with. If the municipality were granted the licence they would be confined to local areas only, and could not give the same facilities to subscribers who wished to connect with other centres, seeing they had no control over these centres; besides, if any subscriber in a local area wished to have a wire run to his work, which might be outside the local boundary, I fear the municipality could not supply this service, and he would have to fall back on the National Telephone Company with its present broad and general licence, to run this wire; that is to say, if the National Company was still in existence.

2147. But it has not been advocated that the Telephone Company should be put out of existence?—No, I do not say that.

2148. The inquiry rather tends to whether there should not be permission given for competition to municipalities; now, would it not be possible for such competition to exist, and inter-communication to be arranged between municipalities and the Telephone Company, even in these out of the way places to which you refer?—It is quite possible; but, then, there is a difficulty I see of having too many companies; it is cutting up the service instead of consolidating it; my difficulty is going through different exchanges. If I fail to get proper connection, who am I to blame.

2149. Is it your wish that the telephone system should continue in the hands of a company?—I would rather see the telephone nationalised than municipalised, because I do not want a restricted service.

2150. Can it be nationalised; is it your wish to strengthen this company and give to them a greater monopoly than they at present possess?—You could prevent monopoly by fixing a maximum rate.

Mr. *Snape*—continued.

2151. That would not prevent monopoly?—Not a monopoly; but it would prevent their having it too much in their own hands, or running away with the subscribers altogether by putting a maximum figure down; regulating it in that way.

Sir *James Fergusson.*

2152. How far are your collieries from the town?—The distances vary from 10 to 15 miles.

2153. And you have instruments at each colliery, besides at your office?—Exactly.

2154. Have you now and then to wait a little before you find the wires clear?—Occasionally we have to wait.

2155. How long; perhaps 10 minutes?—We very seldom have to wait 10 minutes; very often five. It is a busy wire. It depends upon what time of the day we are speaking to the collieries over the trunk wire.

2156. You have never been made very angry by delays over the trunk wires?—Occasionally; I have not the best of tempers.

2157. You never threw your instrument into the street, like Bailie Chisholm's friend?—No, I have not gone as far as that.

2158. But you think that the delays are not more than incidental to any system?—They are such as may happen to any company.

*Chairman.*

2159. I understand you use the telephone not only to communicate with your collieries, which are outside the municipal area, but for communication with other subscribers within the municipal area?—Yes, we do.

2160. And for communication over the trunk wires to neighbouring towns and to towns at a greater distance?—Yes.

2161. And that, therefore, you are interested as a municipal subscriber and as an extra-municipal subscriber, and also as a correspondent with different parts of the country over the trunk wires?—We are.

2162. What would you say about the system during the time you have had experience of it; has it been an improving system or the reverse, or has it been stationary?—I think they have made rapid improvement. I did not like when they started the new call system, but it is an improvement upon the old system.

2163. When was that introduced?—Perhaps a year or two ago, or not so long back as that.

2164. And you have noticed during that time a decided improvement?—A decided improvement.

Mr. Robert Kay, called in; and Examined.

*Chairman.*

2165. I believe you are Traffic Superintendent of the Glasgow Tramway and Omnibus Company?—I am.

2166. And that you come at the request of the Telephone Company to state your opinion of the service in Glasgow?—Quite so.

2167. And that you are unconnected with the

*Chairman*—continued.

Company in any way?—I am unconnected with the Telephone Company.

2168. Except as a user?—Simply as a user.

2169. During what time have you had experience of the working of the system?—The last six years.

2170. How many telephones are there on the system

*Chairman*—continued.

system of the company of which you are the traffic superintendent?—We have 15 exchange wires and 17 stable connections. In all we have about 200 miles of wire in and around Glasgow.

2171. That is to say 15 exchange wires with a telephone at the end of each, I suppose?—Yes.

2172. What proportion of those are inside the municipal area, and what proportion are outside?—I fancy 90 per cent. are inside, and about a tenth outside.

2173. What effect would a restriction of telephone area to the city limits have upon your telephone system?—It would cut us off altogether from communication with our district offices outside the city; we would have no communication with them at all; we have half-a-dozen cab offices outside the city; we would be entirely cut off from the district in which these offices are situated.

2174. Do you use the telephone merely for communicating with your own offices or stables, or to communicate with other subscribers throughout the area?—With other persons, our own people, and the general public, taking orders for cab and carriage hiring work all over the system.

2175. Does the Glasgow tramway and omnibus working extend over all Glasgow?—We are not a tramway company now; the Corporation took over the tramways last year; but we have offices outside Glasgow at Govan-road, Ibrox, Dumbreck, Minard-road, Crow-road, Scotstown; we have communication with these places to the centre of the city, and to our head offices.

2176. What is your opinion about the application of the Corporation for a telephone license?—I think the work has been well enough performed by the Telephone Company, and I do not see why the Corporation should take it in hand at all. Personally from our own experience as an omnibus and carriage hiring company it would not suit us at all, because we could not get into communication with our district offices.

2177. Do I understand you to express general satisfaction with the service?—We do.

2178. You have had occasional difficulties, I suppose, like others?—Undoubtedly; but we make it a point each morning to call up all our offices about 8 o'clock to find out if the wires are all right, and if they are defective we make a report at once; and we find that the telephone people are very correct, they send men at once if wires are out of order and put them in order again.

2179. You find them prompt?—Very prompt.

2180. Can you give us any instance of rapid communications that you have had in your business?—No, I could not give any special instances, but I know we have simply to call up the complaint office, let them know what we want, and within an hour or two we learn by private means that a mechanic has been there.

2181. And are you using the telephone most of the day?—I use it regularly from early morning until late at night.

Sir *James Fergusson.*

2182. Is there less swearing than there used to be about interruption?—We do not allow swearing at all.

2183. Fewer complaints?—Complaints are fewer; we feel it so in our own business. Whether we get more attention than others or not I cannot say, but we are very large subscribers and, as I have stated, our complaints are readily attended to.

Mr. *Benn.*

2184. You come at the request of the National Telephone Company?—I do, and of course our people are aware that I am here.

2185. And your Omnibus and Tramway Company have been at loggerheads with the Corporation of Glasgow for some time?—No, they took over the tramway lines on the 1st of July last year, and after that date we started omnibuses.

2186. Opposition omnibuses?—Well, I cannot say it is opposition; we started omnibuses.

2187. Well, running side by side with the trams?—Running side by side with the trams.

2188. What would you call that if it is not opposition?—I suppose we might call it the Corporation opposing us because we were in the field first.

2189. I see, that is a very nice way of putting it; I may take it you would be very glad to get your "knife" into the Corporation?—By no means.

2190. Not even by running these buses?—We do not wish to fight the Corporation by any means at all in the way you put it; we simply run our buses.

2191. To assist the Corporation?—To assist the people of Glasgow to get from one point of the town to the other along with the Corporation.

2192. Was not your object, if possible, to make the attempt to municipalize the tramways a failure?—Nay; we thought there was plenty of traffic on the streets for an omnibus service, therefore we put it on.

2193. I may take it you are not on very friendly terms with the Corporation?—Well, we are not bosom friends, certainly not.

2194. That is to say your company would be very glad to send you here to thwart the Corporation of Glasgow in any way?—I could not answer the question in that way; I am not here for that purpose at all.

2195. You have told us that in your opinion the granting of a municipal license to Glasgow would prevent you communicating with your stables, which are outside the area of Glasgow?—That would be so.

2196. But has it been present to your mind that the exercise of a telephone license by Glasgow might be carried out without any interference with your favourite telephone company?—If that could be done, if it could be so arranged, then there would be no difficulty.

2197. Nobody has ever suggested to the contrary?—Can it be done?

2198. Why not?—I can see some slight difficulties; I do not see how the National Telephone Company as one company and the Corporation

Mr. *Benn*—continued.

as another could work very harmoniously together.

2199. Let me put it in this way: You have a powerful Corporation accustomed to do their own works?—Yes, in many ways.

2200. They have control of the streets, and if they can organise a double wire system at considerably lower prices than those of the National Telephone Company to supply the citizens of Glasgow, without interfering with your National Telephone Company and the higher rate you prefer to pay, why should not it do so and go on side by side with the company?—If it went side by side, we, as a cab and carriage hiring company, would be compelled to come on to both systems, because we could not work a business so great as ours without; we could not afford to have the subscribers half-and-half, with a chance of getting only half their work.

2201. You say the present company supplies all your need to your satisfaction?—Yes.

2202. Very well, then; if you want additional facilities and an additional list of subscribers through, we will say, the Glasgow Corporation, you would not object to pay the additional subscription?—Yes, we would; it would be a double subscription, and it is unnecessary.

2203. But you get a double service?—But we do not require a double service.

2204. If other people want it, why should you come here and try to prevent it?—I have come to give you my opinion, and that is that it is not necessary, so far as our business is concerned.

2205. Then we must take it, so far as *your* business is concerned?—Quite so.

Mr. *John Ellis.*

2206. You come here, as I understand, not only with the permission of your Board, but at the request of your Board; is that so?—No, not "at the request."

2207. It is your individual suggestion?—I was asked to come by the telephone people, and our directors and management had no objection to my coming.

2208. I am anxious to ascertain whether your evidence is to be regarded as your individual evidence, or as the evidence of your company?—I should take it that it is to be regarded as the evidence of those who work the telephone in connection with the Glasgow Tramway Company, in addition to my own.

2209. Has it the authority of your Board, that is what I want to know?—It is not minuted in Board minutes; my appearance here is not mentioned.

2210. Then I presume we may take it that your evidence is given for what it is worth by a practical user of the telephone, and uncoloured by any differences of opinion there may have been between your company and the Corporation?—Undoubtedly so.

2211. You have frankly and freely come to tell us your own experience?—Yes, my own experience of the telephone in Glasgow.

2212. And you put aside from your mind entirely, do you, any differences of opinion there may have been?—That is so; I put entirely from my mind.

Mr. *Benn.*

2213. Of course, the question of price does not concern you; if your company has been paying 30*l.* a year, that does not enter into your calculation?—No, because our business is such that we are bound to pay for the telephone, no matter what it costs. It is our aim to get it as cheap as possible.

Mr. *John Ellis.*

2214. Then we get it clearly from you that so far as your opinion is concerned you do not want any increased service; any competitive service?—No, not a competitive service.

2215. And you do not desire any municipalisation?—No.

Mr. *Grant Lawson.*

2216. You said a moment ago that your business was such that you were bound to be on the telephone; you would also be bound to be on any telephone exchange, I suppose, established?—Certainly; if there was a second company started we would be bound to go on to it. That just means double the expense to us.

Mr. *Snape.*

2217. If a competitive system were established at a lower price, would not that have the effect of largely increasing the number of subscribers?—I have no doubt it would. If the subscription was lowered there would be more subscribers go on to the wires.

2218. Would it not be advantageous to your business to have a much larger number of the Glasgow population on the telephone than you have at present even if you had to subscribe to both systems?—That may be true; but I think there is a limit to subscribers; it can go too far; for instance, I do not think if a new company was started it would get the same number of subscribers as is on the present company. I do not know how many are on the present company.

2219. If you continued paying your 10*l.* with the same results as you have at present, and a competing system was established at 5*l.*, which trebled the number of subscribers, would not the treble communication that would be within the reach of your company by subscribing to both these companies be a very great advantage to your company?—It would be some advantage, certainly, but I really think there is a limit to the number of subscribers. I fail to see where, if you reduced the subscription to 5*l.*, you could get treble the number in the Glasgow area. Glasgow is a small place as compared with the City of London.

*Chairman.*

2220. One of the witnesses (I think it was a witness from Glasgow who advocated municipal telephones) expressed an opinion that municipal telephones under the Corporation, with the advantages which they had over the streets, would soon drive the National Telephone Company out of the field. Would you view that with satisfaction?—I would not.

2221. The municipal system being restricted necessarily to the burgh limits?—No, I would not like that to happen at all.

2222. Do you think that would be detrimental to the interests of Glasgow?—It would be.

Mr. JAMES PATERSON WALDIE, called in; and Examined.

*Chairman.*

2223. YOU are a Coal Merchant, I believe, in Edinburgh?—Yes.

2224. At 8, Belford Terrace?—That is my house, 8, Belford Terrace.

2225. That is your private house?—Yes.

2226. You are a partner in the firm of James Waldie and Sons?—Yes.

2227. Coal merchants and colliery owners?—Yes.

2228. You have a number of offices about Edinburgh, I believe?—That is so.

2229. How many?—We have eleven altogether in Edinbugh.

2230. And are they all connected by telephones?—All, either by private or Exchange lines.

2231. And are the private wires put up by the company, or by the Post Office?—By the company.

2232. How many lines in all have you?—We have fourteen private ones between offices, and eight on the Exchange.

2233. How long have you been subscribers to the National Telephone Company?—Since the Telephone Company started in Edinburgh.

2234. How many years ago, roughly, was that?—I think it is about 18 years ago.

2235. What rent do you pay the company now?—£142 a year.

2236. Do you use the telephone yourself, personally, largely?—Yes.

2237. What has been your experience of the work of the telephone system in Edinburgh?—Very satisfactory.

2238. I suppose there are occasional difficulties and breakdowns, as there must be in the telephone?—Yes, certainly.

*Chairman*—continued.

2239. Do you find complaints made fairly frequently?—Yes, we cannot complain of that at all.

2240. You have come, I believe, at the request of the company?—Yes, that is so.

2241. And you are not connected with them except as a subscriber?—That is all.

Mr. *John Ellis.*

2242. You come as an individual witness?—That is so.

2243. Do you think your evidence would be corroborated by any of your friends and persons whom you know in business?—Yes, I think so.

Mr. *Grant Lawson.*

2244. Are your collieries scattered all round Glasgow in different places?—We are only connected to one, by an Exchange line, that is at Tranent.

2245. That is under some other Corporation, is it so, some other local authority?—It is in the County of Haddington: it is 11 miles from Edinburgh altogether.

2246. And if there were a municipal telephone in Edinburgh and another in Haddingtonshire under another authority, you would have to be on both?—Yes, we should have to be on both, because two of the Exchange lines are in Leith as well; we would have to pay to Leith and Edinburgh and Haddington as well, to get the service we have now.

2247. Is that a prospect you view with satisfaction?—No, by no means.

Mr. ALEXANDER RIACH; called in; and examined.

*Chairman.*

2248. ARE you a Journalist, and the Editor of "The Edinburgh Evening Dispatch" newspaper?—Yes; "The Edinburgh Evening Dispatch" newspaper.

2249. Have you had considerable experience of the use of telephones in Edinburgh?—Yes, both of the telephones and the telegraph.

2250. We are dealing here with telephones, not telegraphs; will you state the result of your experience of the telephone system in Edinburgh and the district?—We find, in journalistic matters, that we get a very excellent service; in fact, it is so good in many cases that all our quick work is done by telephone; the written telegram in many cases is too slow; I mean in such things as results of cricket matches, results of elections, and things of that kind, where speed is necessary, we invariably resort to the telephone in preference to the telegraph.

2251. Would that be from the locality where the cricket match is played, or where the result of the election is announced to your office for newspaper purposes?—Within a distance, say, of an area of a hundred miles, or thereabouts; of course, chiefly locally: but, say in the case of the Forfarshire election, or any local elections, the results are invariably transmitted by telephone, and our experience is that we get the results in that way about half an hour before we get them by telegram.

*Chairman*—continued.

2252. Then your use of the telephone is by no means confined to the local area of the City of Edinburgh?—No, by no means; it extends to trunk lines.

2253. I do not know that the Corporation of Edinburgh have applied for a license; I believe they have not?—They have not.

2254. Would you view with approval or disapproval a license being granted for telephone purposes to the Corporation of Edinburgh?—Personally, I am very much in favour of nationalizing the telephone.

2255. You mean of its being taken over by the State?—Yes.

2256. That hardly answers my question, whether you would view with approval or disapproval a municipal license?—At first I was inclined rather to favour municipalisation, until I perceived

*Chairman*—continued.

perceived the difficulties of working through to various other municipalities; I concluded that it would be practically impossible to concentrate the control in any district; I mean, that the management should be concentrated in one centre to make the working anything like efficient, the same as it is in the telegraph department.

2257. That is to say, you consider the best system would be, that it should be in the hands of the State; that is, of the Post Office; but that if not in the hands of the Post Office, the local areas, at all events, should be in the hands of one administration, of one body?—One administration, or of one company for that matter, provided the company was national.

2258. You have also had experience of the working of the telephone in Portobello, I believe?—To my private house.

2259. For communications between your private house and the office in Edinburgh?—Yes.

2260. What has been your experience of the working of that portion of the system?—That it is fairly satisfactory, considering it is only a single wire; if it were on the metallic circuit system, it would undoubtedly be very much better. We look forward to the time when the service generally will be improved by the adoption of metallic circuits. What I mean is, that with the difficulties that the company have with the single wire system, we really cannot complain of it.

2261. But apart from the change from the single wire to a double wire system, has the service been improved?—Distinctly; it is improving every year very perceptibly.

2262. Has the company commenced to change the system from the single to the double wire system in Edinburgh?—Not in Edinburgh, that I am aware of.

2263. You are aware that they are bringing about the change in various parts of the country?—They are, I believe, but not to my own knowledge.

2264. Are complaints met fairly promptly? We have no occasion to complain very often. Our messages are very brief, as a rule; but they require to be very expeditiously sent. Whenever we have any complaints, they are always, so far as my knowledge goes, promptly attended to.

2265. You have come, I believe, at the request of the company?—Yes, although, when they asked me first, I said I would be against them: I told them I was in favour of nationalisation. I had always written in favour of nationalisation as opposed to municipalisation. I would prefer the control being entrusted to one authority.

2266. But you are not connected with the company in any way except as a subscriber?—Except as a subscriber.

2267. I will just ask you this question: I find Sir James Russell, at No. 959, was asked this question by a member of the Committee: "Is there any competition which, in your belief, would be more effective in securing a cheap and efficient service than that of a municipality;" and this is his reply: "I think not; it is quite fair to say, and my own private view is, that competition would not last long within the

*Chairman*—continued.

municipality; a municipality which is not going to make any profit must, I think, inevitably exterminate any competitor." Supposing that was the result of granting a license to the Corporation of Edinburgh; that is to say, that the National Company, and any other licensee of the Post Office, would be exterminated and driven out of the area; would you view that result with satisfaction, or not?—I think that the telephone is one of those things that would not do with competition. I should think that competition, in the case of the telephone (I mean the granting of two or three licenses in one locality) would be almost a national evil. The telephone, like the telegraph, can only be properly worked as one system. Naturally, if there were two licenses, subscribers would have to subscribe to both in order to get the advantages of both. We would consider that a great hardship. It would mean double payment for one thing, with a less efficient service.

2268. And it would mean, I suppose, great waste of capital?—Waste of everything; waste of material, waste of labour, waste of many things. Just on the same grounds that we advocated very strongly the nationalisation of the telegraph, so we should advocate the nationalisation of telephones.

2269. And if not nationalised, that they should be, at all events, under one administration?—Under one administration. Practically, I do not see how the different municipalities could arrange the matter, from our experience of the local friction at present between our neighbouring burghs.

Mr. *Grant Lawson.*

2270. Are you calling the attention of people through your paper to this opinion of yours about municipalisation?—I have written very little about municipalisation.

2271. Your present views are against municipalisation: are you putting these before your readers through your paper?—At first I was inclined to favour municipalisation, to force the hands of the Post Office, or of the Treasury, to nationalise, but after considering the difficulties, I cannot see how municipalisation would be effectual, even with a very wide area; certainly within the mere boundaries of a city like Edinburgh or Glasgow, I do not see how it could work at all.

2272. Have you written some articles in your paper giving that view to your readers?—I do not think I have written since the town council have taken it up.

Mr. *Benn.*

2273. Are you concerned in the price which is paid. May I ask you whether you are a proprietor of the paper?—I am not a partner; no, I am just editor; mine is purely a personal view.

2274. Other than the convenience of the service, you have no particular concern as to whether the yearly subscription is 10*l.* or 20*l.*?—Personally none, except as a private subscriber.

2275. For your private convenience?—Yes.

2276. You have told us you regard the telephone

Mr. *Benn*—continued.

phone as a very great boon, and of very great service?—Very great.

2277. A great advantage over the telegraph?—Yes.

2278. Do not you think it would be a very good thing if that boon could be extended to a class of people who are now prevented availing themselves of it owing to present prices?—I look forward to that in course of time; but it will take time before the price is reduced sufficiently to bring it within the compass of poor people.

2279. Under present circumstances, what do you think is likely to bring about a reduction of price?—Not munipalisation. I only look forward to nationalisation in order to reduce the price sufficiently to create a great increase in the number of subscribers.

2280. You are probably aware that many towns, abroad particularly, have provided themselves with a service at a great deal less than the price charged by the National Telephone Company?—May I ask if you mean the private circuits?

2281. I refer to the provisions for business people in towns such as obtain in Edinburgh?—I am not aware of any municipal telephones in this country.

2282. I will not ask you anything upon that; but I should like your opinion upon this point: Suppose the citizens of Edinburgh were quite prepared to put up with the inconvenience of a separate system for their own local service, and could secure thereby a cheaper service, do you think it is fair or reasonable that they should be prevented enjoying that privilege?—Of course, if the council resolves upon that, that is their affair. As a matter of fact, the subject has not been discussed among the people of Edinburgh; and to judge from the discussion that took place on the subject of electric lighting, I should doubt very much whether the poorer classes of ratepayers would view with satisfaction the municipalisation. Many of the poorer people looked upon the acquisition of the electric lighting by the corporation as rather a hardship; as being more in the nature of a luxury for which they ought not to pay.

2283. I will put this to you just as a journalist, apart from Edinburgh: If the majority of the citizens of any city were to decide to put up with the inconveniences which you have mentioned, do not you think that they should have the opportunity to do so?—Well, I look at it rather from the national point of view, and I think that it would rather hinder nationalisation and the accomplishment of the national idea.

2284. Why so, when the State have power to purchase at the termination of the licence; would it not be a great advantage to the State to have the pick of two systems. Suppose you have the single wire system, which is the system in Edinburgh mainly now, and you had side by side with that a municipal double wire system, which was more efficient and very much cheaper, would it not be a very great advantage to the State to have the pick of the two systems if they were proposing to select a system for that district?—According to my view, you are merely complicating the matter by creating a great number of additional vested interests, which would have to be bought over at the proper time.

2285. If the citizens considered it in their interest that it should exist, ought they not to be accorded the luxury?—I should think it would be unwise.

Mr. *John Ellis.*

2286. Do you think your fellow journalists would concur in your evidence?—I can only speak for our own office.

2287. You do not wish to carry your evidence outside that?—I cannot speak for any other journalist.

2288. Do you think the improvement in the service you have mentioned is due to complaints?—Well, I should fancy it is due to the desire of the company to give a better service. We complain when we have occasion, and we get our complaints attended to.

2289. Stimulated perhaps by complaints, if I may ask you that question?—That I cannot say. Personally we do not get many complaints from readers of the newspaper on the subject.

2290. Then I gather that your opinion of the public feeling in Edinburgh is clearly that a large majority of the ratepayers look upon the telephone as not a matter with which they are immediately concerned, and that they would object to the municipalisation of the instruments; is that so?—I would not presume to speak on behalf of what the feeling of the people would be, but I should think the larger proportion of the poorer ratepayers would be equally averse to taking over the telephones as they were to the electric lighting. As a matter of fact, the electric light is not extended to their districts, but they have to assume the responsibility of payment.

2291. No doubt, having regard to their present social wants and aptitudes, the telephone is not an instrument quite within their reach?—No, it is more of a luxury.

2292. And should be paid for, therefore, by those who desire it, they think?—I am of that opinion.

## Ex-Provost A. H. MONCUR, called in; and Examined.

*Chairman.*

2293. YOU are a merchant and power-loom manufacturer in Dundee, I believe?—I am.

2294. And you have been Provost of Dundee (you were for three years), and at the same time Deputy Chairman of the Harbour Trustees and Gas Commissioners, and other public bodies?—I have.

*Chairman*—continued.

2295. And you are a Justice of the Peace for the county of Forfar and the city of Dundee?—Yes.

2296. I need not ask whether you are well acquainted with all the commercial requirements of Dundee and the neighbourhood?—I should think so.

*Chairman*—continued.

2297. Have you been a subscriber of the National Telephone Company?—Yes, for 10 years.

2298. And have you had personal experience of the use of the telephone?—Certainly, constant.

2299. What is your general impression of the system which has been provided by the National Telephone Company?—In Dundee we have had, I consider, a very efficient service.

2300. Have you read Sir John Leng's evidence?—I have.

2301. Do you agree with that?—No, I cannot say I do.

2302. In what way do you disagree with it?—Well, I do not think the telephone system should be municipalised where there is an efficient service in such a city as Dundee at a moderate price, I think it should be allowed to go on without any separate undertaking.

2303. You were chairman, I believe, of the local telephone company previous to the amalgamation with the National?—Yes, while it existed.

2304. How could you compare the telephone service now with what existed when the competition took place in Dundee?—I should say it was better now for this reason, that the town was divided; part of the town (nearly the half) had one system and the other the national system; consequently if we wished to get connected with the whole town, we had to take an instrument from each company, which brought up the price, and after all the service was not so efficient as it is now.

2305. What was the name of the local company?—The Dundee and District Telephone Company, Limited.

2306. Then, although the competition in the case of Dundee brought down the price of the subscription to an individual company, the general effect of competition was to increase the price the subscriber had to pay?—Practically so.

2307. Because men in the larger businesses had to belong to both?—Yes.

2308. What are you paying now in Dundee?—£8. 10*s.* for the first, and if more instruments are taken 15 per cent. less.

2309. I believe, before competition, the price was still higher than it is now?—In which company.

2310. Of the local company?—The charge of the local company when it began was 10*l.*

2311. And what did the National charge when they first came there?—£20.

2312. Then competition brought the National down to 5*l.*?—To 5*l.*? yes, and we had to follow with 5*l.* 10*s.*; we had a royalty of 10*s.* to pay. For a considerable time the two systems were 5*l.* and 5*l.* 10*s.*

2313. So that a subscriber who wished to be in communication with all other subscribers had to pay 10*l.* 10*s.*?—£10. 10*s.* for a service not better, in fact, not so good, as we are getting now at 8*l.* 10*s.*

2314. Then what is the effect of your experience with regard to competition?—It is not in favour of competition, except in the way of bringing down the price for a time.

*Chairman*—continued.

2315. Do you use the telephone outside the area of Dundee much?—Not a great deal; but occasionally I do.

2316. We were told that the local company paid substantial dividends, notwithstanding the lower rates which they charged their subscribers?—Yes, to begin with, we paid about 9 per cent.; but the last dividend we paid was only 5 per cent., that is the last year of our existence, so that it was coming down.

2317. Were the company at the time, or just before the time, the amalgamation took place, contemplating the necessity of raising new capital?—Yes, they had just resolved to raise new capital, an addition of 5,000*l.*; we had 5,000*l.* first, and we resolved to raise other 5,000*l.*

2318. That is to say, to double the capital?—To double the capital, yes; but not much of it was raised.

2319. And did the National Company when they took over the local company reconstruct the system throughout Dundee?—I believe they did to a large extent.

2320. That is to say, in taking over the wires of the local company, had they to a very large extent to replace them by new wires?—Yes, I understand so.

2321. That would seem to indicate that the general system of the local company was not based upon a very permanent or satisfactory foundation?—Well, I believe not so permanent as the present system is; and then besides we had been in existence for four or five years, and the wires were getting pretty well done, some of them.

2322. What is your opinion with regard to the future of the telephone system?—I am decidedly of opinion it should be nationalised if it is to be changed at all.

2323. But in the event of the Government not seeing their way to take over the whole system, for some time at all events, what view would you take?—I should rather see it in the hands of a strong company like the National.

2324. I believe you come at the request of the company?—I do.

2325. Are you a shareholder?—No.

Mr. *John Ellis.*

2326. I gather that you, being an ex-provost of Dundee, and having fulfilled these public positions, are distinctly against the municipalisation?—Decidedly so.

Mr. *Benn.*

2327. The National bought your company up at 40 per cent. premium, I think, sir?—Thereabout.

2328. And at the final meeting the ex-provost congratulated the shareholders on receiving 9 per cent. for the whole of the period, and on getting back their capital with 40 per cent. bonus?—Yes, an average of 9 per cent.

2329. Now, before they made this bargain with the National Telephone Company, I believe they inserted some provisions for the protection of the citizens?—They did.

2330. That the citizens of Dundee should not pay more than a certain price?—That is so.

2331. Do

Mr. *Benn*—continued.

2331. Do you remember the price?—£10.

2332. Do you think that but for the existence of this company and this competition the citizens of Dundee would be so cheaply served with regard to telephones as they are at present?—I scarcely think so.

2333. Now, during the existence of your excellent company, is it not a fact that Dundee was the best telephoned city in the kingdom?—I could not say.

2334. Sir John Leng, I see, stated that it was; but you can answer this perhaps: the proportion of subscribers, anyway, was larger relatively than that of any other population in the kingdom?—I could not answer that either.

2335. Still, you have a very good opinion of the proceedings of your company, and the efficiency of them?—Yes, so far as it went.

2336. That is to say: suppose the telephone company had not stepped in and absorbed you, the citizens of Dundee were proud of their company, and quite prepared to go on with it?—They were prepared to go on with it certainly.

2337. They were prepared?—Yes.

2338. So that further than serving the interests of the National Telephone Company the interests of Dundee were not particularly served by the absorption?—I think it was improved by the absorption.

2339. You think so?—Very much.

2340. But there were no complaints of your service when you conducted it as the Dundee and District Company?—There was this complaint: that we could not get a thoroughly efficient service so long as two companies existed.

2341. The inconvenience of two companies?—The inconvenience of two companies side by side.

2342. Then may I ask you: supposing a city desired to secure the same benefits as regards service and price as those you enjoy in Dundee, do not you think the same method would be an excellent method to adopt?—Not certainly in Dundee.

2343. In any other town; you succeeded at Dundee in achieving a cheap service, and an efficient service, and that, I think, is largely owing to the existence of your Dundee and District Company; do not you think another town might try the same experiment with an equally satisfactory result?—I do not think a Municipality should try it.

2344. But you tried it and with a good result?—Not as a Municipality, but as a private company.

2345. As the Dundee and District Company?—Yes.

2346. A Municipality could do that, of course?—I suppose it could; but I would not be in favour of it.

2347. Still, there is no reason why it should not?—I think there is.

2348. No practical reason?—I think the ratepayers, for instance, would have good reason to object to pledging the rates for supplying telephones which they themselves have no practical interest in.

2349. Then your opinion is rather one of principle than of practice?—Both.

Mr. *Snape.*

2350. Do you think, after what you have said, that there would be no advantage in competition; you told the Committee a little time ago that?—Not as far as service is concerned, except as a means of bringing down the price if it was extravagant

2351. Was not the effect of the competition in Dundee to increase the number of subscribers from 30 to upwards of 1,000?—Oh, clearly.

2352. Originally; we have had that in evidence before us?—Yes.

2353. And after the amalgamation, instead of the increase being continued, the number of subscribers diminished?—Yes, that is easily accounted for: a great many small shopkeepers, when the price was reduced to 5*l.* or 5*l.* 10*s.*, took the telephone, but when it was raised again to 10*l.* they dropped it; but that did not mean a less efficient service, because really all large shopkeepers and merchants got the telephones, so that although the subscribers were reduced in number the service was practically as good.

2354. Is the advantage of the telephone in proportion to the number of subscribers?—Generally it is, I should say.

2355. Then the effect of the amalgamation was a distinct disadvantage to the community of Dundee by diminishing the number of the subscribers?—Well, it diminished the number of the subscribers certainly.

2356. And that was a disadvantage?—But it did not diminish the number of subscribers who really ought to be on the telephone.

2357. Then is it your opinion that only the well-to-do people should be on the telephone, and that the traders and small shopkeepers have no right to be on it?—It is quite an advantage they should be on it, but it is not so great an advantage that the small shopkeepers should be on.

2358. Do you think they are of that opinion?—I am sure I could not say.

2359. Do not you think they would think it quite as much an advantage to them as you would think it an advantage for you to be on the telephone?—I do not know, I am sure; I suppose it would be so.

2360. Would it not be a disadvantage to the customers of these traders and small shopkeepers that they could no longer communicate with them by telephone?—No doubt there was a certain disadvantage to some.

2361. And would it not be a disadvantage to the traders and shopkeepers that they would have no longer orders coming to them by telephone, and their business thus diminished?—No doubt it would be to a certain extent.

2362. Then the diminution in the number of subscribers which followed amalgamation (I think I have brought you to that point now) would be a distinct disadvantage to the community of Dundee?—Yes; but that was counterbalanced by this great advantage: that we were under one system, and did not require two systems to get connection with subscribers of the telephone in Dundee.

Sir *James Fergusson.*

2363. Could you tell us whether the low rate was remunerative to the local company, what you call the "D. and D. Company"?—Well, I hardly think it was. I do not think we could have continued to pay a dividend on 5*l.* 10*s.*

2364. Sir John Leng said the company made 9½ per cent.; was that made at the cheap rate?—Partly; partly at the dear rate, partly at the cheap rate.

2365. Partly at the cheap rate?—Yes. Then, besides, in making up our accounts, I rather think we allowed too little for depreciation, and I think if we had gone on we would not have been able at the 5*l.* 10*s.* to have paid anything at all; that is my opinion.

2366. How many years did it go on?—About five, I think.

2367. Did it always pay a dividend?—No, it did not pay a dividend the first year. The first year 10*s.* per share was added from revenue to the capital. Then in 1882 there was 10*s.* per share dividend; in 1883 9*s.* per share; and in 1884 5 per cent. per annum.

2368. What was the nominal value of the shares?—£5—4*l.* 10*s.* paid.

2369. Can you say whether, after the price was brought down to 5*l.* 10*s.*, they earned a dividend?—A dividend was paid at the rate of 5*l.* per cent. per annum for that year.

2370. But you do not think they put by enough for depreciation?—No, not enough. They only put 200*l.*, I think, to the reserve fund in the shape of depreciation, which I think, considering the kind of plant we had, was too little, and I think we would have come to see that by experience.

Sir *James Fergusson*—continued.

2371. Then is it your view that these low rates could only be maintained by putting a certain cost upon the ratepayers?—I would fear that.

*Chairman.*

2372. I understand the local company, the Dundee and District Company, was in existence before the National Company came to Dundee?—Oh, no; the National Company came first.

2373. Oh, the National Company came first?—Yes, and we tried to get them to reduce their rate all we could; and when we found that they would not, then we started this district company.

2374. And the result of the amalgamation was that the National Company was limited to 10*l.* a year?—They were limited to 10*l.* a year as the maximum price; they have come actually below that of their own accord.

2375. But the terms of the amalgamation were a maximum limit of 10*l.* a year?—£10 a year.

2376. Are you aware that at that time, with the exception of Edinburgh and Dundee, which are, of course, on a different footing, those being very much larger towns, every town in Scotland that had a telephone service was at 10*l.*?—I understood it was higher in some parts, but I could not state positively as to that.

2377. We shall get that from the company?—Yes.

Mr. James Crombie, called in; and Examined.

*Chairman.*

2378. I believe you are a Merchant and Shipowner in Aberdeen?—Yes.

2379. And that you have carried on business there for nearly 50 years?—I have.

2380. Have you been for a long time the agent in Aberdeen of Messrs. Langlands, the shipowners, of Glasgow?—Twenty-five years.

2381. And have you been manager for 12 years of the Aberdeen, Leith, and Moray Firth Shipping Company?—I have.

2382. During that time, or part of that time, have you been a subscriber to the National Telephone Company?—Yes, from its commencement almost.

2383. How many instruments have you?—Six, I think.

2384. Have you used the telephone yourself personally, and through your clerks and officials?—Very much personally.

2385. What is your experience of the system they provide in Aberdeen?—I think it is very good indeed.

2386. Have you during that time added to the number, because you have found them effective for the purposes of your business?—I have.

2387. Do you use the telephone locally in Aberdeen, or do you use for communications outside Aberdeen?—I use it all round; eight miles round about; in two or three cases.

2388. Eight miles outside Aberdeen?—Eight miles outside Aberdeen, and pretty frequently to Dundee.

*Chairman*—continued.

2389. I suppose you have experienced difficulties occasionally?—Now and again there has been some difficulty. I believe we should have a better and cheaper service if there were more facilities given to the company for getting wayleaves, and all the rest of it. The difficulties have always been very willingly redressed and promptly attended to whenever they were called attention to.

2390. By the National Telephone Company?—By the National Telephone Company.

2391. You speak of facilities with regard to wayleaves; have the company, to your knowledge, had difficulties with the Corporation?—No. They have had with owners and occupiers of property. I have tried to help to overcome them often. I know very well they have had great difficulties now and again.

2392. Would they be difficulties in connection with underground wayleaves for their junction wires?—I do not see that there should be any.

2393. But the difficulties you refer to are connected with these?—Connected with overhead work. The company is at the mercy of every person who refuses to allow them to go across, you see.

2394. The company, I believe, have introduced into Aberdeen the call wire system?—They have.

*Chairman*—continued.

2395. Has that been an improvement?—A great improvement; a vast improvement.

2396. You also have in Aberdeen, I believe, the advantage of being able to send telegrams to telegraph offices by telephone?—That is so; that is one of the greatest possible facilities.

2397. Is that a facility which the company have given?—They have to arrange it.

2398. It is done by arrangement with the post office?—By arrangement with the post office.

2399. But they have given it to the subscribers free of charge?—Free of charge; they have.

2400. What rate do you pay now in Aberdeen?—The general rate is 10*l.*; 8*l.* 10*s.*, and I dare say in case of a number of instruments there is a contract.

2401. It used to be higher, I think?—It was 15*l.*; I think Aberdeen was the first place in which it was brought down to 10*l.*

2402. Was that a voluntary action on the part of the company, or was it due to threatened competition?—Well, there was some threatened competition. I was taken into counsel, and I said I thought if they could bring it down to 10*l.* it would add very greatly to the number of subscribers, and stop anything in the shape of competition, which would be a simple confusion, and that was done.

2403. Then, you hold a very strong opinion against competing systems in the same area?—I think it would lead to absolute confusion.

2404. You are speaking as a user of the telephone, and not from any technical experience which you have had of the working of the two systems?—I can easily see what it would result in. I am speaking as a practical user of the telephone, and I cannot conceive, if there were two exchanges in Aberdeen, that there would be anything else than confusion.

2405. Have you read Mr. Treasurer Bisset's evidence given before this Committee?—Yes, I did read it.

2406. I understand from what you have said you differ from him?—I differ very much from him, and am very much astonished at his evidence; I think it must have been given from his inexperience of the telephone. It is most wonderful how very many mistakes are made, by people of intelligence even, in the working of the telephone. I might just perhaps give you one illustration: a gentleman of very large business experience and good intelligence came up to the Chamber of Commerce with a very grave complaint against the company. He had in an emergency endeavoured to get connection during the night. Some of his family were ill, and he could get no connection, and he made a very grave complaint; the result was an investigation, and it was found that he had tried to work during the night the same way as during the day, and, of course, in that way he could get no connection whatever. Although the rules were very definitely laid down, still he neglected them, and that was the result.

2407. It is hardly necessary to ask you, after your evidence with regard to competition, what your opinion would be of a municipal system in Aberdeen added to the National Company's system?—I think, as I have already said, that it would lead to confusion. I would certainly prefer nationalisation rather than municipalisation, if there is to be any change. I should have said that the rate in Aberdeen is 8*l.* 10*s.* now, the general rate.

2408. That is to say, it used to be 15*l.*; it was reduced to 10*l.*?—And then to 8*l.* 10*s.*

2409. And then to 8*l.* 10*s.*?—Yes.

2410. I believe you have come at the request of the National Telephone Company; but you are not connected with them, except as a subscriber?—Only as a subscriber. I daresay I volunteered. I was very anxious to try, in my own humble way, to defend them against the unfair aspersions that had been made against them, and that is the fair feeling with which I almost volunteered rather than wait to be asked.

Mr. *Snape.*

2411. In what way would the confusion arise (you say absolute confusion would arise) from the existence of two or more competing companies?—Because you would require to join both exchanges, and you could not get your messages conveyed otherwise.

2412. Are you aware that in Dundee, some time ago, there existed two competing companies?—Well, I heard there was very considerable confusion, and that is how I am speaking.

2413. If there was confusion, that would lead to a diminution in the number of subscribers, would it not?—Well, I do not know whether it would or not. Of course, if once individuals have got means of communicating by telephone they are not very willing to give it up, even if there are difficulties in the way.

2414. Would you expect, if there was this absolute confusion, that there would be a very large increase in the number of subscribers, the number going up from 30 to 1,000?—Well, the report I always heard from Dundee was that *one* exchange would be very vastly better, and the sooner they got it the better.

2415. You see we have had it in evidence that, confusion or non-confusion, it gave such satisfaction that, instead of there being only 30 subscribers, the number became a thousand; how, then, do you expect, or why do you form these anticipations, that the confusion would be so great and unsatisfactory?—I believe the telephone is one of the greatest facilities of the age, and I believe people will continue it, and that the number to take it will increase if they can get anything like facilities. I still maintain, however, that one exchange is preferable to two.

2416. Of that there is no question; but supposing there are two competing companies, and that the effect is to reduce the charge, is it not probable that it would be a greater advantage to the community to have the lower charge, attended by this inconvenience, than the high charge with one exchange?—I would rather have a fair amount of charge, with proper facilities and no confusion, than a lower rate. It is all very well to have a cheap rate if you have proper facilities and

Mr. *Snape*—continued.

and a good service, but otherwise I would certainly prefer to pay the higher rate.

2417. It would appear from the Dundee experience that a large number of people are against you, and that, notwithstanding the confusion which you say would exist, and the increased rate, the result of the competition there was a distinct advantage, and a desideratum by the public?—My own impression is, that even when the rate was raised in Dundee the increase was still more.

2418. No; we have had evidence to the contrary (the last witness corroborated it); that is to say, that the number of subscribers diminished when the rate was increased?—It may be so.

Mr. *Grant Lawson.*

2419. About that new company in Dundee, do you happen to know whether, when it was started, it was vigorously pushed?—I do not know from personal experience specially; I just heard the reports.

2420. You mentioned something as to a complaint to the Chamber of Commerce about the Telephone Company; did the Chamber of Commerce go into that complaint against the Telephone Company?—Well, they listened to it for the time being. I believe they were corrected ultimately, in regard to what was the cause of the complaint.

Mr. *Grant Lawson*—continued.

2421. Do they undertake to consider complaints of that description now, in the Chamber of Commerce?—They seem to do. I am not a member.

Mr. *John Ellis.*

2422. Your evidence is so diametrically opposed to Mr. Bisset's that I should like to ask you whether you think the people you meet in business in every-day life agree with you rather than with Mr. Bisset?—I am perfectly certain, without being egotistical, that the great majority agree with me.

2423. You are of opinion that the great majority of the telephone subscribers in Aberdeen would say that there is a fairly efficient service there?—Yes, I am quite certain of that.

2424. And would not concur with Mr. Bisset, that it is wholly inadequate and very bad indeed?—I respect Mr. Bisset very much, in many ways, but I cannot agree with him in those points at all.

2425. I suppose the merits of the telephone in Aberdeen have been a matter of public interest and discussion, have they?—They have.

2426. And you come here clearly to tell us that in your opinion most people agree with you?—That is so.

*Friday, 3rd May* 1895.

MEMBERS PRESENT:

Captain Bagot.
Mr. Baird.
Mr. Benn.
Sir Charles Cameron.
Mr. John Ellis.
Sir James Fergusson.
Sir Julian Goldsmid.
Mr. Grant Lawson.
Mr. Arnold Morley.
Mr. Solicitor General.
Lord Stanley.

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Mr. ANDREW DRYBURGH PROVAND (a Member of the House); Examined.

*Chairman.*

2427. You are Member for the Blackfriars and Hutcheson Town Division of Glasgow?—Yes.

2428. With reference to the two points upon which you are going to speak, if it is convenient to you, we will take the trunk wire charges first; that is the first point mentioned in your letter; will you give us the result of your examination of that question, the trunk wire charges in Scotland?—The trunk wire system in Scotland has been more fully developed and made more complete than in England. The National Telephone Company issue a table for Scotland which includes about 2,330 inter-town rates; it gives the tariff from one town to another.

2429. The National Telephone Company?—The National Telephone Company. This is a copy of it, taken out of their own directory, and I think perhaps it would be better to put it in.

2430. If you will hand it to me I will look at it (*the document is handed in*). Do you want to call attention to any special points in connection with it?—Yes. These are the rates charged at present, but under the agreement which the Post Office authorities have just entered into, these rates would be very much increased because the mileage scales of the National Company are less than those of the Post Office.

2431. You speak of the agreement which the Post Office has entered into with the National Telephone Company; I think you are a little wrong there, are not you? There is no reference in the agreement to the trunk wire charges?—You will find the rates the Post Office intend to charge stated in the Treasury Minute, Clause 14.

2432. But that is not in the agreement?—We have heard it stated many a time that the agreement is carrying out the Treasury Minute. If the Post Office do not intend to charge these rates, and you will say so, sir, that may make some difference in what I have to say; but the scope and effect of the agreement is before the Committee, and the scope and effect of this agreement is, that it will make the trunk wire charges in



*Chairman*—continued.

Scotland enormously higher than they are just now.

2433. Will you point out any clause in the agreement which bears out that statement?—It is not in the agreement I understand you to say?

2434. No?—Well, I will refer to the agreement; I will see.

2435. I think you may take it from me that there is nothing in the agreement which embodies those trunk wire charges; they were charges which were indicated in the Treasury Minute as a scale of charges which, of course, will be subject to revision; to Parliamentary control and Parliamentary decision, if the matter comes before Parliament; there is nothing in the agreement embodying them and making them compulsory in the future?—But, sir, you have yourself written to a correspondent who complained about them, saying that you will not make any change in these charges; I can read your own letter.

2436. No doubt those are the charges which the Department at the present time propose to charge?—I am only giving my evidence as to "the present time." If by-and-bye you reduce the charges, my evidence will go for nothing; but the charges are those made or intended to be made, and as to which you have yourself written to a correspondent stating that you would make no change in them.

2437. I only want to get it upon the evidence that there is nothing in the agreement that in any sense bears out that statement?—On the 18th October last year your secretary wrote to Messrs. D. M. Stevenson & Co., in Glasgow. I shall only read the last paragraph of the letter, because that is what applies to this. He says in that paragraph, "I am to add that he (*i.e.*, the "Postmaster General) is unable to hold out any "hope that the Government will in any case "depart from the system of charge for the use "of trunk lines which was adopted in the "Treasury Minute of the 23rd May 1892." That is the very document.

2438. That was a uniform system to be applied on a mileage scale?—Precisely; and, according to that mileage scale, the charges in future will

*Chairman*—continued.

be enormously higher than the National Telephone Company's charges in Scotland at the present time.

2439. We shall be glad to hear evidence upon that point if you choose to give it?—Very well. I have given the rates in the Treasury Minute; I have read your own statement that the Department will in no case depart from the charges of the Treasury Minute; and I can give you illustrations of how the charges will work.

2440. Will you let me look at that letter, please?—Yes (*handing in the same*).

2441. I think you said you were prepared to give evidence upon the increased charges?—Yes. I have therefore copied on one sheet of paper here the Post Office mileage scale and the National Telephone Company's mileage scale, and below a table showing how both scales will work out, and the rates. I will quote from the joint table, which will give the facts relating to both. Up to 20 miles the company and the Postmaster charge the same, but from 20 to 25 miles the Postmaster will charge twice as much as the National Company. From 25 to 40 miles the charge, again, will be the same, but from 40 to 50 miles the Postmaster will charge twice as much as the National Telephone Company. From 50 to 75 miles the Postmaster will charge one-third more than the Telephone Company. From 75 to 80 miles both charge the same. From 80 miles to 100 miles the Postmaster will charge 50 per cent. more than the company. From 100 to 120 miles they both charge the same. From 120 to 125 miles the Postmaster will charge one-third more than the company. From 125 miles to 150 miles again the charge is alike. From 150 to 160 miles the company, for the first time, charge more than the Postmaster.

Mr. *Solicitor General.*

2442. How much more?—One-fifth; 2*s.* 6*d.* against 2*s.*; but from 160 to 175 miles the charge will be the same; and from 200 miles upwards there will be on most distances, or on some distances, at least, a higher charge by the company than by the Postmaster. The reason for these varying rates is because the scales do not run in precisely the same way; but the increased charge made by the Postmaster over that of the company is not represented entirely by these differences of rates, because the company at present do not charge for their inter-town service as high as they might charge according to their scale. A very large number (I cannot say how many) of the 2,330 rates quoted in that table are charged at much less than would be payable if the company made the charges according to the table. I think, to save trouble, that the table should be put in also.

Mr. *Grant Lawson.*

2443. If they made the charge according to the maximum, you mean?—If the National Telephone Company charged according to their published mileage scale, their charges in a very very large number of the rates on the table would be higher than what the actual charge is.

Sir *Julian Goldsmid.*

2444. Those wires have been transferred, have they not?—I know nothing at all about that. I have taken out the different rates that are given in the table as near as I can. There are altogether 2,330; 349 of those are at 3*d.*; 683 at 6*d.*; 727 at 9*d.*; 414 at 1*s.*; 145 at 1*s.* 6*d.*; nine at 2*s.* 6*d.*; and three at 3*s.* According to the tables of the Telephone Company, the rates for all short distances are much cheaper just now than they will be by the Post Office scale; in many cases, as I have just shown, the Post Office will charge twice the current rates. On the other hand, when the rates become very high, the Postmaster's rate will be a trifle, but only a trifle, less than that of the company according to its scale.

*Chairman.*

2445. What do you call short distances; how do you limit short distances?—The company's rate up to 25 miles is 3*d.*, but the Postmaster's rate for 25 miles will be 6*d.*

2446. Under 20 miles they will always be the same?—The same; according to the scale which I read from the table.

2447. But I understood you to say just now that for short distances the Post Office charges will be always greater than those of the National Telephone Company?—No, not always, but very often.

2448. Very often; you mean there are cases?—Yes, not invariably, but very often that will be so. It will be seen from the figures I have read out that an enormous number of these rates come under a shilling. Out of the 2,330, there are really only about 150 of them that are over 1*s.* (the business is all done at the low rates), and there are really only 12 of them over 1*s.* 6*d.*; so that the advantage which the Post Office offer of a cheaper rate for a long distance is one for which we may say: Thank you for nothing, as we shall hardly ever use the long distance.

2449. How did you get the information with regard to the proportion of short and long distances?—I have not given any proportion; I have mentioned the number of rates at different prices.

2450. You stated just now that the number of conversations over short distances was infinitely greater (or I think you used some stronger expression) than the number of conversations over the short distances?—I think not; but the very figures I have read out prove it to be so. If out of 2,300 users there are only 150 of them who pay 1*s.* 6*d.* and upwards, it follows that the business done must be much greater at the low rates than at the high ones. In the table there are actually only 12 rates above 1*s.* 6*d.*

2451. Is not that because the trunk wire system has not yet been extended to the full extent it probably will be under the Post Office?—I shall explain the reason presently, but I do not see any early future at all for any large trunk business being done over long distances. I shall explain my reason for that when I come to the second part of the evidence.

Sir *James Fergusson.*

2452. Should you be surprised to hear that a Member of the House takes up the telephone at Manchester

Sir *James Fergusson*—continued.

Manchester every night for a conversation with his partner; are there many such cases?—I have made inquiry into what is done between Manchester and London, and I can only find one case (I have heard of one besides) of a merchant speaking over the trunk wire to Manchester; and he has to go to the company's office in London to do it. He could not do it from any office in London. I am telegraphing backwards and forwards to Manchester every day; my office is in Manchester. Some days I am sending three, four, or five telegrams, but I should never think of attempting to do business in Manchester by telephone.

2453. This gentleman does it from the House of Commons every night?—Well, I tried to speak through it last night only to the West End here, and instead of being able to hear the gentleman that I was trying to get through to I heard Sir Richard Webster, who was in the next box to me, trying to get through to someone in London.

2454. This gentleman's partner at Manchester told me last night that it was wonderfully clear. However, that is evidence?—Well, I could fill this room with witnesses who would give a very different account of it if the Committee were pleased to hear them; I know I have tried to do it and cannot; I know others that have tried it. I only know the one instance I speak of, and the gentleman goes to the National Telephone Company's office here, and speaks from there to his representative in Manchester. He does it one day a week only, and he does it by a pre-arranged signal at a particular hour. Every Thursday he goes to the Telephone Company's office in London to speak through to his managing man, who is waiting in Manchester, lying in ambush I might almost say, for the words to come over the wire.

*Chairman.*

2455. The company will be able to give us evidence as to the user of the long distance trunk wires, such as that from London to Manchester; but you are defending the rates now charged by the company for the trunk wire service as against the proposed rates of the Post Office?—Certainly.

2456. Are you aware that these rates that the company charge are for subscribers only, and that non-subscribers are charged double rates over the trunk wires?—The total business that the company will do with non-subscribers over trunk wires amounts to very little indeed.

2457. That may be the reason because they charge double; but are you aware of the fact that the company charge the non-subscriber double the amount?—They may do that.

2458. Whereas the Post Office charge both the subscriber and the non-subscriber equal rates?—Very well; the Post Office will never make anything at all out of charging non-subscribers another rate. I object, as a supporter of the telephone company, on behalf of all mercantile men, that we should be charged excessive rates in order that the Post Office may make a gift of the service too ther people, who are not entitled to it. If the Post Office intends to do so it is another of the gross injustices that they



*Chairman*—continued.

practise on the community. I want to give a few examples of how the rates will operate in Scotland. I take Ardrossan and Ayr, and Bo'ness and Dalray. Those four towns are distant respectively from Glasgow 31, 40, 26, and 23½ miles, and the present rate is 3*d.* to all these places; but the Post Office, according to their mileage scale, will charge 6*d.* for the trunk service; that is to say, these rates will be doubled. Then I will give an example or two of a higher rate. Leith is at present a 6*d.* distance from Glasgow, but the Post Office trunk charge will be a shilling, twice as much as is paid just now. Then, when we come to greater distances, the actual increase in the charge can also be shown. I take Carlisle and Arbroath as two examples. These are respectively 102 and 103 miles from Glasgow. The present trunk charge of the National Telephone Company is 1*s.*; but by the Post Office mileage rates the trunk charge will be 1*s.* 6*d.*, one-half more. From the particulars of the different rates which I have given, there must be an enormous number of messages at the low rates compared with what there are at the high rates; and, therefore, this increase of charge by the Post Office will fall very severely indeed upon those who have hitherto had the advantage in Scotland of these low-rated inter-town trunk facilities.

2459. Those figures you have selected and given the Committee as samples of other rates?—Samples; I have not analysed the whole 2,330. I took the distances from each other of the towns I have given from railway guides, but I might, if I had spent days over it, have picked out no doubt hundreds of them, because I believe the charges of the National Telephone Company, as a rule, are much within the rates they might charge under their scale. I suppose that the Post Office have statistics supplied to them by the National Telephone Company showing how many messages were sent at low rates and how many were sent at high rates; they certainly require such information before they buy the trunk wires over which these messages are passed; otherwise, if they have not that information, then they have not the data which they ought to have.

2460. That is going into past history, I think; that is a closed book?—I merely mention that they ought to have it. I inquired in the House, or some gentleman put the question. I remember reading it; and it turned out that they had not that information, at least they said they had not. I am sure that hundreds of cheap messages go over the trunks for one dear one. The Post Office were apprised of this by the National Telephone Company themselves before the agreement was made. I find that Mr. Forbes, the chairman of the National Telephone Company, drew attention to this very point when he was giving evidence before the Select Committee on the Telegraphs Bill in 1892.

2461. May I ask how this bears upon the question of the excessive charges proposed to be made by the Post Office?—I only point out, sir, that you were told by the chairman of the Telephone Company who sold you the Trunks that you intended, according to your scale, to charge the public twice as much as he charged.

 2462. I am

Sir *Julian Goldsmid.*

2462. We have had these quotations already?—I am sure you have never had this quotation, with all deference to you; it has never been alluded to here.

*Chairman.*

2463. We would sooner have your evidence than that of Mr. Forbes at present; he will come later on?—In Question 372 of the evidence taken in 1892, Mr. Forbes warns you that you are going to charge in certain areas twice as much as he charged; and he gives you examples of it. We do not want to be worse treated in Scotland than we have been if we can help it. I wrote to the Post Office some time ago about these excessive trunk charges, and the reply admitted that in certain cases the rates would be somewhat higher than at present, and in some cases somewhat lower; and I asked for a statement of those which would be higher and of those which would be lower. I have continued to ask for that statement down to the 27th of April; that was only a few days ago. Of course, the statement has never come to me, for a very sufficient reason, which I have no doubt will be present to the minds of the Committee; that is, that it could not be shown that any of them were lower at all, excepting when the rates rose above 2*s.*, and, as I have said, that is no concession whatever, to offer a cheaper rate at prices which bring no business at all as a consideration for charging twice as much as we pay at present for the shorter distances.

2464. I think you have stated that the charge is in no case lower on behalf of the company, except where it exceeds 2*s.*; are you aware that from Edinburgh to Aberdour the company's charge is 9*d.*, and that the proposed charge by the Post Office is 3*d.*?—Is it in the table; are you reading from the table?

2465. I am asking questions?—I could not answer that.

2466. Are you aware that from Edinburgh to Burntisland the charge of the company is 9*d.*, and the charge of the Post Office 3*d.*; that from Edinburgh to Cowdenbeath the charge of the company is 9*d.*, and of the Post Office 3*d.*; the same to Cupar, 9*d.* and 3*d.*; to Dunfermline (these are all from Edinburgh), 9*d.* and 3*d.*; Kirkcaldy, 9*d.* and 6*d.*; Perth, 1*s.* and 6*d.*; I mean, if those are facts (and I ask you to accept them from me), they are short distances, and entirely inconsistent with the statement you have just made?—I shall certainly accept these facts from you, sir; but why were these facts not given to me in reply to my numerous applications to the Post Office?

2467. The Committee is not here to answer questions put by a witness; any letter you write to the Post Office will, I am sure, be answered?—I hope the Committee will take it from me that I made these applications months ago, and I have been unable to get any reply to them.

2468. Was not your application for thousands of rates, which would necessarily have taken a very long time for the Department to prepare; and is it not a fact that you have been informed that it was impossible to give you that information within anything like a reasonable time; you

*Chairman*—continued.

yourself have spoken of thousands of trunk wire rates, and you were informed it was impossible for the Department to provide you with that information within the time in which you asked for it?—No, with deference, they never gave me that information at all. There is nothing whatever of what you say in these letters. I think the best way for me to simplify this is to put this correspondence which I have had with the Post Office into the evidence; that is the best way. Then the Committee can read in it a great deal more than I have been able to tell them. I think that is the best way of dealing with it. I may have to refer to one or two matters in it; still I would suggest that for the approval of the Committee (*the letters were handed in*). I would now, with the permission of the Committee, answer any question addressed to me on other matters, unless any gentleman has any more questions to ask in reference to the point we are dealing with now, the trunk charges in Scotland.

2469. Is that all the statement you wish to make with regard to that point?—Yes.

2470. Then I have one question to ask you: you referred to this letter from the Post Office in answer to a letter from Messrs. Stevenson, and you have stated that the answer was that the Post Office could not hold out "any hope that the Government will in any case depart from the system of charge for the use of the trunk lines"; did not that refer to an application from Messrs. Stevenson that they might be allowed to continue an arrangement which they had had with the National Telephone Company that they should pay an annual sum for the use of certain wires?—It could not refer to that, because it quotes the Treasury Minute. There is nothing whatever in the Treasury Minute about the annual sums payable for wires; nothing whatever.

2471. I have the correspondence here, and it refers to the arrangement which Messrs. Stevenson had with the company for an annual charge for the use of certain trunk lines?—Very well.

2472. Is not that the answer from the Department; the answer to the effect that the Department can hold out no hope: "The Postmaster General can hold out no hope that the Government will in any case depart from the system of charging for the use of trunk lines, which is a system of payment per conversation"?—Yes, but does it not mention the Treasury Minute? It says he will not reduce the charges in the Treasury Minute.

2473. No, it does not; it says nothing of the kind?—If you will give it me perhaps I can find it.

2474. It is the system of charge which was adopted in the Treasury Minute?—Precisely so. If the Postmaster General will tell us that he will allow such persons as Messrs. Stevenson & Co. to do their business at a cheaper rate than what the public are to do it at, then that will meet the point I have raised.

2475. The Postmaster General will consider any application that may be made, but he will treat Messrs. Stevenson exactly as he will treat any other member of the public?—That answers my query. Then they will have to pay in future the rate which is put down in the Treasury Minute instead of being able to carry on their business

*Chairman*—continued.

business over the main lines at 50*l.* a year, as they and many other firms have done with the National Telephone Company.

2476. Certainly; Messrs. Stevenson will have to pay what other members of the public have to pay, and as those are the rates which are given they will have to pay those rates; if the Department, either under the pressure of Parliament or other pressure, determined at any time to lower those rates Messrs. Stevenson, with the rest of the public, will get the benefit of the reduction?—I will just give the Committee the information I have had from Glasgow on this point. The principal shipping firms in Bo'ness, Grangemouth, Greenock, Ardrossan, Troon, Ayr, and other towns formerly had annual arrangements. These have probably all now expired or will expire, and these firms who formerly paid yearly rents now pay for single conversations; but on account of the much increased charge they make, of course, less frequent use of the wires. Messrs. Stevenson themselves told me, in the correspondence which the Postmaster General has in front of him, that if they, in future, use the telephone trunk wires to the extent they have done hitherto in the conduct of their business, the expense to them will be about 15 times what it has been up to the present time, and that is a very serious matter to business men. Contrast the position of a firm like that of Stevenson, who are coal shippers, and other firms who are in the iron industries in Glasgow, with the telephonic inter-town communication facilities which are given, say, in Belgium, where the rates are nothing like so high, and where the service is infinitely better. A merchant at his desk in a town in Belgium can make up all the details of a contract without leaving his desk by his ready and cheap inter-town facilities, whereas his competitors in the neighbourhood of Glasgow will now be charged a very high rate, an excessive rate I call it, for the same facilities, and (as I shall prove presently) for a service which is much inferior.

2477. Are you aware that in Belgium they have a uniform rate all over the country of trunk wire charges?—I understand so; the same as in Germany.

2478. Though for short distances the charge is considerably higher than it will be under the Post Office in Scotland?—Will the right honourable Gentleman state what is a "short distance" in Belgium? The ordinary annual subscription to a Telephone Exchange includes service to places 20 or 30 miles distant.

2479. The short and the long rates are the same; I should think that most of the distances in Belgium are short as compared with those of England and Scotland?—Over the Continent, with one or two exceptions, the inter-town rates are much lower than in this country; in some countries they are microscopic compared with what they are with us, and in Germany the rate is only 1*s.*, no matter what the distance is. You can telephone in Germany for 1*s.* a distance that it would cost you, according to the Post Office scale, in this country, I think, about 7*s.* or 8*s.* to telephone. If there are any more questions respecting Messrs. Stevenson I shall be happy to answer them.

Sir *Julian Goldsmid.*

2480. I think not?—Very well.

2481. Might not the other members of the Glasgow public, the public generally, say that that was a very strong undue preference which the National Telephone Company have given these 50 or 60 merchants you refer to?—I do not think so.

2482. Do not you think they might?—The National Telephone Company have no duty to the public at all; their duty is to themselves, to do what is best for themselves.

2483. That is a matter of opinion; but I am asking you this: As a member of the public at Glasgow, if the Messrs. Stevenson have a lower rate (and a very much lower rate) by an annual contract, do not you think I should have ground of complaint?—None whatever; the general public might as well complain of any merchant who sells at one set of terms for wholesale business, and another set of terms for retail business.

2484. You are aware of the law of undue preference with regard to railway companies and a great many people, are not you?—The laws which relate to railway companies are great mysteries.

2485. You are aware that there are cases constantly tried with regard to undue preference?—There are cases constantly coming before the Railway Commission, and the Railway Commission was appointed to meet a well-known hardship; but there would be no hardship in the present case at all.

2486. You do not consider that there is?—If there was there would be a Telephone Commission appointed to deal, for the public, with the matter you speak of, as the Railway Commission deals with the railways.

2487. That would not do, because the Post Office are taking over the trunk lines; therefore there could not be that, quite?—The Government do not take the companies over, and they would still be liable to be dealt with by such a Commission.

2488. I point out to you that railways are subject to a charge for undue preference before the Railway Commissioners, and I ask you whether, in this case, it would not appear to you that the National Telephone Company were giving an undue preference to a very small number of subscribers in Glasgow as against the rest of the Glasgow public?—No; and the position is not identical at all. The railway companies are all constituted under Acts of Parliament obtained in this House, and consequently liable to this House. The National Telephone Company had no Parliamentary rights of any kind whatever until they were given them—only a few days ago, I might say—by the present Postmaster General.

2489. That is a matter of argument?—Not at all; there is no "argument." I could quote the statements of the chairman of the Telephone Company himself, who has told Committees here that they had no Parliamentary rights whatever; they have got them now, but they had none before.

*Chairman.*

2490. I understand you to advocate that the Department (the Post Office) should enter into contracts with particular individuals allowing them a general use of trunk wires for an annual rental; are you in favour of that policy by a

*Chairman*—continued.

Government Department?—That might be done. The Government Department lets out telegraphic cables to the Press, and I have no doubt could let them out to others if they liked to hire them. Why not let telephone cables as well as telegraph cables?

2491. You would approve of the Government Department (the Post Office) entering into contracts with individuals, giving them special privileges with regard to trunk wires as compared with the general public and the charge imposed upon them?—There might be a very large number of questions that would arise out of that that we cannot go into; but, generally, I say this: that there is no justification whatever for this contract unless to benefit the public interest; and if this contract were not made with the Telephone Company for the benefit of the public interest, then it is a bad contract for the public, and ought not to have been entered into.

2492. That is hardly an answer to my question, which was a specific and definite question; my question was, whether you would approve of the Public Department having the right to enter into special contracts with individuals, giving them a preferential right over others?—I would give large users of inter-town telephone service the same privileges that the Post Office at the present moment give large users of the telegraph service.

2493. Would you approve of that same principle being applied to the telegraph service and the postal service; that is to say, that a man who sends a large number of telegrams over the public wires should do it at a cheaper rate than the general public, or that the man who sends a large number of letters through the Post Office should do it at a cheaper rate or for an annual sum which would be beneficial to him?—The case of letters is not identical; telegrams and telephones are more like each other, but even there there might be some differences to consider if the question was gone into. I can only repeat and confirm what I have said, that an agreement which takes away from the public facilities which they have just now, and is only going to give them facilities and terms far more onerous than those they at present enjoy, is a bad agreement, and one that ought not to have been entered into at all, because it is against the public interest.

2494. Are you aware that upon the Postmaster General there is a statutory obligation to treat every member of the public on exactly the same lines with the exception of the Press, where, when the telegraph system was taken over, special terms were given in order to meet the public necessities?—Well, special terms might be given when you take over the trunk wires in the same way.

2495. To individuals?—To individuals; to large users. I might have to consider the thing more at length, but I have stated my views on the subject. You gave facilities to the Press in connection with telegraph lines when they were taken over, and the principle would, as far as I can see, not be departed from if you gave facilities over the trunk wires to those who require a great deal of inter-town service.

*Chairman*—continued.

2496. Then now, perhaps, you will go to the second point, the connection of the trunk wires with local exchanges in Scotland?—Perhaps, before leaving that other point, sir, I may just say one thing: In the correspondence with the Post Office it was pointed out that one advantage the public would have under the new agreement was that telephone service would be given to different towns, inter-town telephone service, where there is no inter-town telephone service just now. Well, that is no advantage to the commercial centres in Scotland; and it is commercial men who are entitled to be considered in reference to this service; it is a business necessity, and we cannot in Glasgow, or in any other business city like that, compete with those we have to compete with unless we have a cheap and efficient service. The result of opening telephone service to outside localities will be one of two things: If it does not pay in some places then you must surcharge other localities where it does pay to meet the cost (which would be unfair to those localities), or it must be charged on the Treasury; that is to say, outlying localities would be furnished with telephone service at the cost of the taxpayer. That is not done with telegraph work. You will not run a telegraph line anywhere unless you have an undertaking from the neighbourhood to give sufficient business to meet the expenses, or you get some guarantee from those in the neighbourhood to make up the loss. Therefore, the advantage which is set out in the letter is no advantage whatever; on the contrary, it must operate either as a drawback to those who require it for mercantile purposes, or it must be done at the cost of the general taxpayer.

2497. Then do I understand that you are against the extension of the trunk wire system, and do you maintain that Glasgow will not benefit by having a trunk wire service which will put them in communication with Bristol, Cardiff, Liverpool, and other large towns in the country?—It was not these towns that were meant in the letter, and I do not mean these towns. I do not call these outlying towns at all. We have trunk service to these towns now. I am not sure that it is open from Glasgow to Liverpool, but it has been in course of construction from a time long before this agreement was entered into.

2498. Then you think the extension of the trunk wire system generally should be governed by the consideration of whether it is beneficial to Glasgow?—I think, in fairness to the public, the considerations which have governed the action of the Post Office in reference to telegraphs should govern their action in reference to telephones. It is idle to say to us in Glasgow, in Edinburgh, Leith, and Greenock, or any place where we must have the telephone as a commercial necessity, we have opened it to John O'Groat's, to Land's End, or to some other place, from which you will never earn as much money as would pay the cost of the operators' wages. It is the mercantile community that are entitled to be considered. If it was not for them you would have no telephone service at all.

2499. Now, shall we go to the second point; the action of the trunks on the local exchanges in

*Chairman*—continued.

in Scotland?—Very well, if you have any question to ask me, sir.

2500. No, we understood you wished to give a statement?—Very well, I will state the point briefly.

2501. I think the statement must be confined to these two points?—I do not think any member of the Committee will have reason to complain of any of my answers going outside the scope of the reference to this Committee, and what the Committee are pleased to hear from me. Although you have had evidence here already about the local service in Glasgow being bad, I may just say that my own experience of it is this: At intervals of every few weeks or every month or so, I stay at the Central Hotel in Glasgow. That has continued since 1886. The service over that time has certainly been bad; but when one uses the word "bad" or "good" in reference to a telephone service it must be understood as a relative term, because it never can be good in Glasgow so long as it is telephoned by a single wire system; therefore, when I say it is bad, I am merely uttering a truism, because it is impossible it can be good; it has been sometimes bad as a single wire, and sometimes it has been fair. They fitted a new switch-board in Glasgow, I think it is a year or two ago, and for some time after that it was absolutely impossible, I may say, to get through to anybody at all, in any time that any man could afford to give to the operation; and down to my last visit, which was only a little while ago, I found that the time taken to get through, and the number of persons you could get through to took so long, that I had to give up the attempt to get through. My plan now is to make a list of those I desire to speak to, and hand it to an assistant porter; he struggles with it for an hour, or an hour and a-half in the morning, and reports the results to me as I go in and out of the hotel. A single wire system never can be a good service; and I will quote the language of the Chairman of the National Telephone Company if the Committee desire that from me, distinctly saying so.

2502. No, I think we have heard that two or three times?—No, you have not.

2503. The Committee have?—Not what I was going to quote.

2504. I think it better we should hear that from the chairman himself?—If the Committee accept the statement I have made, which is a perfectly fair statement. It is the fault of the company: they have got a single wire service, and it is a bad one, because it is a single wire. If the Committee accept that of me I will not read it, but Mr. Forbes has repeatedly stated the fact I mention: that the service was bad, and that it was bad because it was a single wire, that there could be no good service whatever in any large area or large town like Glasgow unless it was a double wire system. If the Committee will take that, I will not give the quotations I intended to read to them. I would add this: Mr. Forbes has also said that we never will have a good service in large areas unless we have double wires. We never can have a good inter-town service there unless we have double wires, and I must quote Mr. Forbes, and



*Chairman*—continued.

also Mr. Wallace, on these two points, because it is impossible to have a double wire service unless a new telephone exchange is built in Glasgow, and this applies to every single telephone exchange. Mr. Wallace, who was a director of the New Telephone Company, told the Select Committee on the Telegraphs Bill in 1892 that, unless the cities had double wire exchanges, the Post Office would waste its million of money in providing double wire trunks; and that statement was confirmed by what Mr. Forbes himself told the very same Committee. Now I will read the quotations.

2505. I think we have had those quotations read?—I do not think it. It is Question 403. I may mention, sir, that I have not read every word of the evidence taken by the witnesses; I have read a great deal of it, but I am sure I shall not ask this Committee to listen to one word from me that has been said by any previous witness if I know it, and you certainly will not have any quotation that has been given before. At Question 403 of the evidence before the Select Committee in 1892 Mr. Wallace says that unless they can carry out a twin wire service in large towns the Post Office will waste their million of money. He also says that a local single wire system is of no use whatever for Government trunks which are double wires. In Question 401 he repeats the same words substantially; he says, "With twin trunk wires it is absolutely essential that the local companies should have a twin system locally." From that it follows that it is impossible that we can have an adequate inter-town service in Scotland unless our local exchanges are fitted with double wires. The question has been asked by you, sir, of more than one witness, if he was aware that the National Company were doubling their wires just now. With reference to what they are doing in London others may speak; in reference to the country and Manchester or Glasgow they are quite willing to double the wire from my office to their exchange, but they will charge me 2*l.* 10*s.* a year for doing it. I may have the double wire, but I must pay for it before I can have it. I must pay half as much for that as would fit a new wire altogether, instruments and everything included. The cost of re-constructing the exchange in Glasgow would come to a very large amount of money, and the cost of that would be (must be in fact) charged to the users of telephones. Under the agreement the Telephone Company are not restrained in any way whatever as to charge, as to supply of service, or in any way at all; they are as free to charge us 50*l.* a year as they are to charge us 10*l.*, and as they charge 2*l.* 10*s.* a year extra for a double wire they would have to raise their present exchange rates to give them a return upon any extra capital which they laid out in fitting a whole exchange. That brings me to the point of what we pay just now. We are charged 10*l.* a year in Glasgow, and you have had evidence already of what Glasgow is willing to construct an exchange for, and charge for it; that is to say, 5*l.* a year. Now, it is impossible that there can be any reduction of that charge by the National Telephone Company, on account

*Chairman*—continued.

of the enormous capitalization. Each exchange user in the United Kingdom is capitalized to the extent of 60*l.* by the National Telephone Company. I will give you the details of these figures if the Committee desire it; it is very easily done.

2506. Are you aware that, in Glasgow, the Royal Exchange is already fitted with a complete metallic circuit?—It may be as you say; I will take it from you, sir, but I have only telephoned from the Central to the Exchange. I gave up, a year or two ago, attempting to get through from the Central in Glasgow to any person on the Telephone Exchange at all. I have never spoken over a double wire in Glasgow. I am sure of that. I know perfectly well when I am speaking over a double wire, and over a single one; the difference is so great that any person of telephone experience can always know over what he is speaking. I was going to say the National Telephone Company's capitalization is 60*l.* per user, and it is made up in this way: Their capital is about four-and-a-half millions in round figures; they are going to sell to the Government about 400,000*l.*, or rather more, of trunk wires. That will leave them with a capitalization of say 4,200,000*l.* There are about 70,000 telephone users altogether, 60,000 exchange users, and 10,000 (about) private users (and the cost of the private exchange wires would average very much the same); the 70,000 users divided over the 4,200,000*l.* of capital (which will remain after they sell the trunks) gives a capital of 60*l.* for each user in Glasgow. Now you have it in evidence, and I repeat it, that Glasgow can have a double wire for a capitalization of 15*l.* per user, and supply the service for 5*l.* per user, the annual service, whereas the present company charges 10*l.* I show these facts to prove that it is impossible that under this agreement, which gives us no relief whatever in any way, Scotland altogether will not enjoy anything like the inter-town telephone facilities which we have just now, and that it will entail a continuation of a rate double what is reasonable for the local service.

2507. Is that the end of your statement?—Yes; if it pleases you, sir, I was going to speak of the effect of the terminal charges on the trunks. I have got some notes about it.

2508. As affecting the trunk wire charges?—Yes, how they will work. The trunk wire charges are shown on page 17 of Parliamentary Paper 267. That is in the agreement. The effect of these terminals will be this, that if the Municipality of Glasgow build an Exchange, unless Edinburgh and other towns with whom they might communicate also build municipal exchanges, they will have to pay to the National Telephone Company 3*d.* on every message which does not exceed 1*s.* 6*d.*; 4*d.* on any message which exceeds 1*s.* 6*d.*, but does not exceed 3*s.*; and 6*d.* on every message which exceeds 3*s.* Well, sir, that makes it impossible for any inter-town business to be done at all, or nearly impossible, between a solitary Municipal exchange and the other exchanges which are in Scotland at the present time. The effect of that would be that all the rates that I have mentioned under 1*s.* 6d., and these include out of 2,330 the whole number, except 12, would be charged 3*d.* extra. Well, on the 350 rates at 3*d.* each, it would make 100 per cent.

2509. That would only apply to cases where a subscriber to another system wanted to communicate with a subscriber to the National system; and then the charge is not obligatory; it is only a maximum charge; it is the maximum which the company could charge?—Yes. The table shows the maximum terminal charges which the National Telephone Company could make, and as the company is allowed by the agreement to charge them they are certain to do it; indeed they have already commenced. This charge of terminals was invented in order to prevent subscribers to an Exchange, competing with the existing ones, from being able to communicate with any other town, as the message would be surcharged when it passed through the delivering Exchange of the National Telephone Company.

2510. Do you suggest that there should be no terminal charges?—None whatever; no terminal charges, I mean.

2511. I asked you as to terminal charges?—No terminal charges whatever.

2512. Do you agree that where a private individual, who is not a subscriber, goes to a call-box of the National Telephone Company, he should have to pay if he wants to use the National Telephone service to communicate with a subscriber of the company?—We come again to who are entitled to be considered.

2513. Would you answer the question, please. Do you agree that a member of the public, who is not a subscriber, if he wants to use the National Telephone Company's service at a call-box, should pay for the use of the telephone service which the company provide?—Certainly not. I am not speaking about that at all.

2514. Will you answer the question; do you agree that he should have to pay?—Certainly he should have to pay.

2515. Then why should not a subscriber to a municipal service or to some other service also have to pay the National Telephone Company if he makes use of the service which the National Telephone Company provides?—I will give you one reason; but there are many reasons. In the first place, that man is not a subscriber to any telephone exchange at all (the one you are speaking about), and consequently he gives nothing to the State, but the trifling percentage upon an occasional message. I am speaking on behalf of those for whom telephone service is necessary, and without whose assistance we should have no telephones whatever. I am assuming that the business men of Glasgow came here and asked for a license, and erected a telephone exchange, and unless Edinburgh, Dundee, Aberdeen, and other towns in Scotland also did so they would be unable to get their two messages delivered in these cities unless they were surcharged with this threepence, fourpence or sixpence, as the case may be; and I say that for such service there should be no terminal charges. Terminals were expressly invented to prevent competition.

2516. I do not think we can go into the object with which terminals were sanctioned?—Sir James Fergusson, the late Postmaster General, asked that very question of Mr. Lamb; I will quote it

*Chairman*—continued.

it. (Question 350): "Then I will ask you this: Was the provision in Clause 8, sub-section 2, of the agreement, that is to say, regarding the exchange of messages from one company to another, introduced to meet the objection of the companies that a license to a new or local licensee would enable an exchange with a small capital to benefit by the great expenditure of a larger company;" and Mr. Lamb said, "That is so." That clearly proves what the object was why terminals were invented; and more than that, that they were invented then is quite clear, because there is nothing whatever about them in the Treasury Minute.

2517. I think you have not looked carefully into the Treasury Minute?—I have; but I will take it from you, sir, if you can show it me in the Treasury Minute. We will come back to the Treasury Minute, if you please.

2518. I think, if you will look at page 5 you will see that it is not so?—We will come back to that, please. In this question Sir James Fergusson (the Post Office at least, I should say) then thought that terminals should be charged against a company because it had a small capital.

2519. I do not agree to your interpretation. (Sir *James Fergusson.*) Nor do I?—It is stated here, as clearly as it can be. A company having a small capital could not build trunks for itself, and, consequently, it should not be allowed to use the trunks of any other company. But what were we doing when we were making this agreement? I say "we," because it is made for the public. We were handing over enormous privileges to the National Telephone Company which they did not possess before then. Those who made that agreement, therefore, should have seen that they were protecting the public. Does the Committee desire to know what those privileges were, because again I quote Mr. Lamb; he stated them himself.

*Chairman.*

2520. Then, I think we need not have them again; we have them fully before us?—It would make it so much clearer if I repeat them.

2521. We have them very fully before us?—He says here (Question 194 of the Evidence taken before the Parliamentary Committee in 1892), in reply to a question by Mr. Ellis (it is the last part of his reply I am quoting): "I think at first that the commission of 5 per cent. might be stated as 2,000*l.* per year; but it would enormously increase as the arrangement developed and matured. My money value of the concessions, therefore, might be stated as between 5,000*l.* and 6,000*l.* per year." Then Mr. Ellis asked him (the next question): "With an enormous prospective possible increase?" and Mr. Lamb said "Yes." Then further, in reply to Question 206 (in speaking of what the State was doing for the company) Mr. Ellis asked: "If the State decided to buy the telephone system, it would have to purchase back every concession it now makes, would it not?"—(*A.*) "Yes," he says, "in that sense undoubtedly." Now, in view of the concessions and rights conferred on the National Telephone Company the public interest should have been protected when this agreement



*Chairman*—continued.

was made, and if a municipality was to build an exchange it should have been stipulated, to all licensees not only the National Telephone Company, but every municipal licensee; and every other company who held a license should be compelled to carry the messages and deliver them, in fact, to interchange messages in every town. There should be no charge for terminals at all. It will be found to be very very oppressive, and, indeed, that fact is admitted by the Post Office themselves in the correspondence to which I have already had to allude, and I will just refer to what Mr. Lamb himself said to me in a letter on that subject. When writing to me on the 30th January last, he says: "The question of making a terminal charge in respect of communications between persons on different exchange systems is one which must rest a good deal with the Telephone Companies, who are left a wide discretion by the Treasury Minute, and by the "Heads of Arrangement." If the companies insist upon making the charge in respect of their system as against post office subscribers, the Postmaster General will no doubt have to make it in respect of the post office system as against the company's subscribers," and in reply to that I see that in the letter which I wrote to him I said: "Quite so; that is to say, against one increased charge the Postmaster will retaliate by making another, and telephone users will be mulcted." There are other reasons besides those I have given for showing that there should have been no terminal charge whatever. It makes a license granted to a municipality now only of partial value, even in a locality, and it makes it almost valueless to them in reference to inter-town communication. Why it affects the value of a license in a locality is because there are some persons in manufacturing and industrial business centres who would not go on a telephone exchange at all unless they could communicate freely with other places without extra charge. Consequently, to take the case of Glasgow, these would be compelled to stay on their present exchange or might do so rather than join a new municipal exchange, until at least other municipal exchanges had been opened in other towns with which they might interchange their business without any surcharge. Now, sir, I refer to the Minute about the inter-town charges, and the statement that the origin of terminals is to be found in the Treasury Minute.

2522. I wanted to correct the statement you made in the House of Commons, and before the Committee, that there was no reference to the terminal charges in the Treasury Minute. If you look at page 5, and to the note at the bottom which refers to paragraphs 13 and 14 of the Treasury Minute, you will see these words: "These charges are independent of the charges which the companies make on their own account for sending a telephone message"?—That does not refer to charges which the companies, in the event of competition, might have the right to charge. I have not the least doubt that in the mind of the company when this agreement was entered into they had some intention of making a charge of some kind; but the Post Office had nothing of the kind in their mind. Will the right honourable gentleman put the gentleman who

*Chairman*—continued.

wrote that here on the stand, and ask him if, when he put that note there, he understood that it referred to terminal charges to be made by-and-bye.

2523. I have already stated that the Committee are not sitting here to answer the questions of a witness?—I am merely saying that the mere language of this note shows it could not have anything to do with terminal charges which never were heard of until six or eight months afterwards. This note does not speak of a future charge at all, but of a charge they make at that time "on their own account, for sending a telephone message." Why the terminal is for delivering a telephone message. There is no allusion whatever to terminals in the note on page 5 of the Treasury Minute. It could not apply to terminals, although it may have been put in by the telephone company with an eye to something in the future.

Sir *James Fergusson.*

2524. You have challenged the propriety of the trunk line charges now laid down; was not one of the reasons in the Treasury Minute for the change of system proposed this: that the then system was causing great loss to the telegraph revenue, and that it was desirable that the public revenue should be protected by the trunk wires being taken into the hands of the State?—That was one of the reasons given by Mr. Lamb, but there were other reasons.

2525. I beg your pardon; the Treasury Minute I am speaking of, not Mr. Lamb; was not that one of the reasons given, quite outside the Treasury Minute?—Will you refer me to the paragraph?

2526. Paragraph 1, the second sentence: "It is impossible to continue the present system under which the telegraph revenue is seriously suffering;" and paragraph 3: "Unless trunk wires are in the hands of the State, a monopoly, injurious to the public interest, would inevitably ensue," and so on. Therefore, was it not contemplated that the trunk wires should be taken into the hands of the State, and a loss to the telegraph revenue thereby prevented?—Yes, that was one of the reasons, certainly.

2527. Then was it not directly contemplated that an adequate charge should be made to prevent the telegraph revenue suffering by the competition?—To which do you refer just now; are you referring to the tariff which is in the Treasury Minute at Clause 14.

2528. No; the question I asked you is this: You have challenged the propriety of the trunk line charges now laid down. Was not one of the reasons in the Treasury Minute for the change of system proposed this: that the then system was causing great loss to the telegraph revenue, and that it was desirable that the public revenue should be protected by the trunk wires being taken into the hands of the State?—The result will be, or the result may be, that the State will earn more money now than they did before, but it will be by punishing the telephone users. That is bad policy for the State.

2529. You agree, in reply to my question, that it was one of the objects contemplated, to

Sir *James Fergusson*—continued.

protect the telegraph revenue?—I agree it was an object to protect the telegraph revenue.

2530. Then in cases where a charge appeared to be too low as compared with the telegraph revenue, it would be consistent with the proposals laid before Parliament, that the price should be raised?—You may raise it; you have raised it in fact.

2531. That would be consistent with the scheme laid before Parliament, would it not?—The words they made use of are these: "For conversations on the trunk wires of the State the following charges will, it is thought, be equitable, while, at the same time, sufficient to secure a margin of profit." That was the basis, I presume, upon which the Post Office arrived at this scale. The Post Office can only justify this agreement by proving that it is in the public interest. If they are going to charge the public more for any service than the public pay just now, it is perfectly clear that the agreement is not in the public interest, but against it.

Mr. *Grant Lawson.*

2531*. I think you said about terminals that the imposition of terminals would render the system of municipal exchanges impossible?—Let us take a concrete case; take Glasgow.

2532. Would it make it impossible or difficult?—Difficult; but if you will permit me I will explain the exact effect in any one town.

2533. I will take your answer, that the imposition of terminals would render the system of municipal exchanges difficult?—It would be a hardship to Glasgow.

2534. It would make it very difficult to them?—It would be a hardship to them. There would be advantages on both sides. That is why I desire, if you will permit me, to take a concrete case; you will then understand how it will affect the whole question. If Glasgow were permitted to build a municipal exchange they would offer to their users the modern double wire service for their 5*l.* a year, but unless Edinburgh and Greenock and other places built municipal exchanges they would not be able to send inter-town messages as cheaply as the National Telephone Company. The Glasgow Exchange, you would see, would offer them facilities in one way; the National Telephone Company would offer them facilities in another; consequently it would depend largely upon what each particular user wanted, as regards whether he would feel it a hardship or not. Take an ordinary resident in Glasgow: he wants no inter-town wires and cares nothing for them; he would at once go on the municipal exchange. Take men like those I named some time ago, men who carry on business largely with the shipping ports, both on the east side and the west side of Scotland. I think they might say: "We will not join the municipal exchange although it is cheap and good, for we cannot get through to Leith, Bo'ness, Girvan, Troon, Ardrossan, and other towns unless our messages are surcharged." They might think proper to continue with the National Telephone Company, but on balance for one firm that would want inter-town communication (or one person) I may say 30 or 40, or perhaps 100, would want a first rate local service.

2535. The

Mr. *Grant Lawson*—continued.

2535. The commercial houses would not go to the municipal exchange, you think?—They might do it; but remember the number of houses that do the business about these districts; the shipping houses are not very large, numerically speaking; they are very unimportant as compared with the rest of the mercantile houses in Glasgow.

Mr. *Benn.*

2536. With reference to this difficulty which you have just explained with regard to terminals, suppose a mutual arrangement was made, say, between a municipal exchange at one end and the National Telephone Company at the other that interchange of terminals should be waived at either end, that difficulty would at once disappear?—Certainly; then there would be no terminal.

2537. Then take the case of London, if I may ask you about that; you know something about London?—Yes.

2538. Where the inter-town service only represents, probably, 5 per cent., or not 5 per cent., of the total number of messages, this terminal difficulty would be a very small difficulty?—I do not believe the number of persons in London who would use the telephone service contain amongst them anything like 5 per cent. who would care about an inter-town service. I should think that for 1 per cent. who wanted inter-town service 99 would be satisfied with a good local service.

2539. Then if the citizens of London or Glasgow were prepared to put up with this probable difficulty of terminal charges, do you think it should be urged as a reason against a license?—Certainly not; I am not urging it against granting a license at all; I am pointing it out to show the injustice of the treatment we are getting from the Post Office by the agreement made with the National Telephone Company.

2540. Then what did you mean just now by telling the Committee that, in view of these terminal charges, the granting of municipal licenses would be difficult?—Not the granting of them.

2541. Well, the working of them?—I have given you a concrete example.

2542. The point is this: I want to ask you how terminal charges, which in London would only affect probably 2 or 3 per cent. of those using the telephone, would be prohibitory to the exercise of a municipal license?—It would not be in the least prohibitory in London at all; it would not affect one person in a hundred. I should, perhaps, explain that Glasgow, Liverpool, and Manchester are cities which will always use far more inter-town service than London. London is an enormous residential city, where the bulk of the people want no inter-town communication whatever, except by means of the telegraph. There are parts of the country where the inter-town service is chiefly found: in Scotland, Glasgow, Edinburgh, Leith (the seaports of both cities), and in England, Liverpool, Hull, Manchester, and all the Yorkshire towns; there is also a large inter-town service in the Birmingham district, and perhaps some between

Mr. *Benn*—continued.

Newcastle and a few towns close to it, small places, but besides the four districts I have mentioned, inter-town service in this country must be very small indeed.

2543. Suppose the districts which do a very considerable inter-town business, in view of these charges which you consider unfair, still press for the exercise of their municipal rights—the exercise of a municipal telephone—why should you say that the thing is difficult; you gave the Committee the impression just now that it was almost impossible?—I did not intend to convey any such impression to them. Glasgow's representatives said here that they would be delighted to take a license and put up with any drawbacks connected with it.

Sir *Charles Cameron.*

2544. I want to ask one or two more questions about that point, but you have put it clearly. Your view, as I understand it, is that you are in favour of the municipalisation?—Certainly.

2545. And you think you would support the action of the Glasgow authorities in starting a telephone exchange if they got authority?—Certainly.

2546. You are aware that the Edinburgh people have applied for a license and that they also desire to put up an exchange similar to Glasgow?—Certainly. I am not sure that they have said they have applied for a license, but they have said they will apply, which amounts to the same thing.

*Chairman.*

2547. Edinburgh has not applied?—No; but they have said it is their intention to apply.

Sir *Charles Cameron.*

2548. If Edinburgh and Glasgow were to have municipal exchanges they could interchange inter-town telephone messages without charge?—Certainly; and they would do so.

2549. And if they did so probably the result would be that the National would agree with them for convenience to waive terminal charges?—I have no doubt whatever the National would in their own interest find themselves compelled to do so.

2550. And even if they did not, if Glasgow could supply a telephone service for 5*l.*, against the present 10*l.*, that would leave a balance of 5*l.* a year?—Undoubtedly.

2551. That would pay for a great many terminal charges in the course of the year?—There is an enormous percentage of the Glasgow users that would never pay a terminal because they never would use an inter-town trunk.

2552. And as a matter of fact there are very few of the users who send a couple of inter-town messages a week?—Very few; only shipping firms and firms doing business with other towns.

2553. So that as a matter of fact, although your opinion is against these terminal charges, and although you think in certain cases they may be prejudicial, you do not mean the Committee to infer that, in your opinion, they would constitute any real obstacle to the municipal

Sir *Charles Cameron*—continued.

license?—Certainly not. I desire to express, and to be understood as meaning, simply that the Government ought never to have made a bargain in which terminals were permitted at all; they are wrong in principle. They will affect a very small number indeed of telephone users.

Mr. WILLIAM HENRY PREECE, C.B., F.R.S., called in; and Examined.

*Chairman.*

2554. ARE you Engineer-in-Chief and Electrician to the General Post Office?—Yes.

2555. And I believe you brought over the first pair of practical telephones in 1877?—Yes; and I have devoted uninterrupted attention to the development of telephony ever since.

2556. I believe you are prepared to give us the result of your practical experience upon the question of telephony?—I am.

2557. Will you just very shortly describe the instruments which are necessary in order to make a complete telephone circuit?—Yes. First of all comes the Bell telephone receiver which everybody, of course, is acquainted with. There is very little difference indeed between the first instrument brought over in 1877 and the latest receiver as used now. This instrument sprang nearly perfect from Bell's, the inventor's, hands; and it remains to this day the simplest and the most delicate electrical instrument we possess. That, of course, is used to reproduce speech. The transmitter is that part of the instrument that converts the sound waves in the air (the waves that come out of my mouth) into electrical waves, and they are transmitted through the conductors. At the other end of the line they operate the Bell receiver. Well, this transmitter has passed through numerous phases, and it has not approached finality yet. Every day we are receiving suggestions and making improvements, and it has passed through various stages from the one introduced by Bell and improved by Edison. The microphone transmitter, of which Mr. Lamb gave evidence, was brought out in 1878, and is the one used still; and every day, as I said just now, modifications are being produced. Of course, these instruments have to be connected together by two wires forming a metallic circuit. These wires are best twisted about each other.

2558. You are describing the twin-wire system, so far as it has been developed?—Yes, the twin-wire system. It was false economy that introduced the use of the earth. The principal systems have been dependent upon one wire. The one wire makes a defective system; it leads to innumerable troubles; it causes imperfect working; and it really is the principal cause (as you have had plenty of evidence before you to show) of the great unpopularity of the telephone industry of this country.

2559. At first, I suppose the single-wire system was the general system, and the metallic circuit system has been the result of experience?—No; we commenced with metallic circuits in the Post Office; and it was the introducers of the telephone both in America and in England, who for economy used the single wire, and not, as they ought to have done, a double wire.

2560. I hope the Post Office considers economy?—We have used single wires in districts where there is no possible disturbance and where the distance is very short, and there economy comes in; but where efficiency is the rule we have always used the double circuit.

*Chairman*—continued.

2561. That is the twin-wire system, and that is the system that is being gradually introduced abroad and in England?—It is being introduced very rapidly in England, almost generally in the United States, and over the Continent very largely indeed.

2562. You have described the receiver and the transmitter and the wire making up the circuit; will you just shortly describe the switchboard which the Committee have had an opportunity of seeing?—Yes. The switchboard derives its name really from railway practice; it is a small apparatus which shunts or directs the currents that go along one circuit on to another circuit, terminating at the same office or exchange. Those members of the Committee who visited the Exchange yesterday have seen how rapid and how simple the operation is to transfer the currents from one circuit to another circuit. All the earlier switches were derived almost directly from telegraphic practice. The early switches were merely adaptations of switches that were used on telegraphs. In the early day, of telegraphs we used to switch one town on to another for telegraphic purposes. Now these switchboards have taken different forms. The members of the Committee yesterday saw in Lime-street that which is called the panel or upright form, in Gerrard-street a modification of this which is a table form. The one great advance or improvement that has been made in switchboards was the introduction of the multiple switch. The multiple switch is a switch which gives every operator in an exchange complete command over every subscriber to that exchange; so that if you had 10,000 subscribers centring at an exchange, every single operator would have under her control every one of these 10,000 subscribers; but the introduction of the multiple switch, while it has facilitated very much the working of the exchange, has brought with it certain troubles and difficulties of its own, one arising from the tremendous multiplicity of holes or "jacks," as they are called. The largest switch I believe in existence is one for 6,000 subscribers.

2563. Where is that?—There is one in Paris and there is one in New York. I am not quite sure that the Telephone Company here are not fixing one up; they have not got sufficient subscribers yet, but there is room for 6,000 subscribers. A switchboard for 10,000 subscribers means 500,000 jacks, and every one of these jacks involves some four or five joints, so that the fitting up of a switchboard for 10,000 subscribers

*Chairman*— continued.

subscribers means three or four million joints to be made in one room.

Sir *Charles Cameron.*

2564. Are all these under the control of one operator?—Yes, the whole of the 10,000 subscribers can be placed under the control of every single operator.

*Chairman.*

2565. Of course, the 10,000 subscribers would be divided up among a large number of operators?—Oh, of course.

2566. But by the multiple system, each operator would have the means of communicating with the "jack" belonging to each subscriber?—Yes; there would probably be 150 to 200 operators in the exchange; two or three have the charge of each section; and there are 50 sections; but each section is complete in itself for 10,000, so that 10,000 subscribers end or terminate on each section of this board.

2567. And although there may be 150 or 200 operators each operator is able to put the subscriber who comes to her section into communication with any other subscriber that comes into the exchange if that subscriber's wire happens to be free at the time?—If it happens to be free. That is the principle of the multiple board. The table form at once sweeps away half the number of jacks, so that on a 10,000 exchange, instead of having half-a-million jacks you would have only 250,000. I say "only 250,000" relatively; that is an enormous number; but in Chicago and one or two other places in America they are now trying what is called a divided board, which reduces the number of jacks to one-fifth instead of one-half; and this divided board is reported upon extremely favourably. It has been worked out principally in Chicago.

2568. That would run to 100,000 jacks instead of 500,000 jacks for 10,000 subscribers?—Yes, for 10,000; but in the working of switches we have not reached finality yet.

2569. Experiments are being carried on?—Experiments are being carried on in America, which is far ahead of us in the working of telephones. Experiments are being conducted there (especially at Chicago) to still further modify the form of switches.

2570. And I have no doubt the Department are watching the result of these experiments very carefully to get the advantage of them?—Yes. I visited America, as you know, in 1893, and continue in special correspondence with both the telephone and telegraph companies there, and am kept quite alive as to all the experiments going on.

2571. Would you shortly describe the operation when one subscriber wishes to come into communication with another?—The first operation is that of calling. Each subscriber must attract the attention of the exchange operator, and in turn the exchange operator must be able to call each local subscriber. This is done generally by either the falling or the rising of an indicator at the exchange; and in the subscriber's office or house it is done by the ringing of a bell. We have considerably modified this method in the Post Office, for we have introduced



*Chairman*—continued.

a system peculiar to the Post Office, and it is gaining a good deal of attention and a good deal of favour in the United States, and they are now commencing it there. Instead of relying on ringing bells we have introduced a system of permanent currents and visual signals; it is not dependent upon sound at all. There is a little indicator that moves, and this indicator gives different signals. I will tell you what in a moment; but I want first of all to call the attention of the Committee to another modification, that is known as the "Law" system of calling. On this system, which is introduced at Glasgow, and it is in work now at Glasgow (we have heard a good deal about it), there is a call wire, apart altogether from the talking wire which goes to every subscriber's house, and at the central station there is an operator who has always got a telephone on her head, attached to her ear, and a subscriber merely has to go to the talking wire and say "I want No. 30"; this is heard by the operator, and the operation of switching through is conducted.

2572. Supposing half-a-dozen subscribers make a similar communication at the same moment, how does an operator get over that difficulty?—That does happen at times, but somehow they succeed in differentiating one caller from another, and it settles itself. Of course at the first start it created difficulty, and there is no doubt that it is one of the causes of the trouble we have heard of from Glasgow.

Sir *Julian Goldsmid.*

2573. When was that introduced?—The "Law" system was introduced in America about 1879 or 1880. It was introduced partially in Manchester some three or four years ago, and in Glasgow I think about two years ago, or perhaps not quite so much as that.

2574. That accounts for certain of the disturbances we have heard about?—There is no doubt about it. I may tell you that experts on this question are very much at variance as to the relative merits of various systems of calling. Of course, as the representative of the Post Office I consider the Post Office system the best in the world.

2575. You were going to explain that to us?—I will directly; of course, I am subject to prejudice on that subject. At the same time I think the Law system deserves a great deal of attention, but it has not been received with favour in the United States.

2576. Personally you like the system which you are going to describe to us?—Personally I like the system which we have got at work in the Post Office, not because it is so simple to attract attention, but because it does two other things; one is that it gives automatically and instantaneously notice to the operator that the wire is engaged or disengaged, and that a conversation is over; as soon as ever a subscriber wants the central station, the subscriber simply lifts the telephone off the hook; that is the signal; there is no ringing at all; the operator answers at once, receives instructions, and can see whether the one is engaged or disengaged; if disengaged the subscriber is put through instantly; conversation commences;

Sir *Julian Goldsmid*—continued.

commences; when the conversation is over you have not to think about ringing off, or attend to any operation at all; the mere act of putting the telephone on the hook is an indication that the conversation is over. It works with great satisfaction to us. It has not met with much encouragement from others, because it involves the use of batteries, and the constant employment of batteries is thought to be very expensive. However, we in the Post Office find that the cost of batteries is so small that it is negligible. The objection raised against the batteries is, I think, a sentimental one.

2577. Of course, really, if the operator can see when the wire is being used and when it is not being used it is a great economy of time; there is no waiting?—Certainly; that is the real object of the introduction of this signal, to expedite the operation and save time. Well, sir, this system that I am describing to you informs the operator at once whether the line is engaged or disengaged, but in the American system and in the system that is used principally by the Telephone Company in England, and what you saw used, is what is called the busy test; the operator takes the plug and just touches a brass ring in front of the hole, and if the wire is engaged it gives a click in the telephone, which the operator knows at once to be the test or signal that the wire is occupied.

*Chairman.*

2578. That is to find out whether the subscriber that the first subscriber wants to be in communication with is engaged or not?—Yes.

Sir *Charles Cameron.*

2579. There is one point more, if you would complete your explanation. I do not understand how, in your system, you attract the attention of the subscriber with whom the first subscriber wishes to get into communication?—It is done by a small needle; this pen will indicate it. As a rule the operator at a switch-board has 50 of these indicators in front of her, and she attends to those 50 and none others.

2580. That is quite simple; but when A wishes to be put into communication with B, how do you call B's attention in his house?—Oh, that is done by a bell.

*Chairman.*

2581. But you first find out whether B's wire is engaged?—Yes, whether B's wire is engaged. There is the indicator, a needle, that in *that* position (*describing*) indicates "Engaged;" in *that* position it indicates "Disengaged;" and in *that* position it indicates that the conversation is finished; so that by these three positions you have these three signals automatically given.

2582. Then if you find out that B's wire is free you ring up B?—Yes; ring up B.

2583. And put the two into communication?—And put the two into communication. The busy test, that is so largely used in America, is now being replaced at San Francisco and at Chicago, and to some extent at Boston. They find that the system of testing takes up time; that is, testing for the click. I have explained, sir, the system of indicating the end of the conversation, and I think I have been through the whole of the operations on an exchange when a subscriber calls or is called, when he is put through.

*Chairman*—continued.

2584. Will you just describe the changes that have taken place with regard to the material of the conductors?—The conductors are now of copper, or sometimes of bronze, but at first iron was much used. Well, iron is inherently bad for telephony, and it is absolutely subversive of clear speech. There is some reaction between the current and the magnetism engendered in the iron that seems to absorb a good deal of the current or the energy that produces clear speech. The result is that when speaking through an iron wire the voice becomes blurred, and you lose those gentle intonations in the voice which distinguish one man's voice from another, so that through an iron wire you very soon lose that individuality which is almost essential to the clear working of the telephone.

Sir *Julian Goldsmid.*

2585. Is there a great quantity of iron wire still left in England in the different parts?—No, a very small quantity. I doubt whether there is any, except on our railway services. I do not think the Telephone Company, and I am quite sure that we, now, would never put up iron wire. There may be in some out-of-the-way places some iron circuits left, but they are very few.

2586. Most of them have been removed?—Certainly.

*Chairman.*

2587. With reference to the comparative merits of overhead and underground systems, will you give us the results of your experience?—Yes. Of course, the conductors placed overhead when they are few in number are cheap and effective, and when placed underground and still few in number, they are dear. I should like, sir, to be quite clear on this point, because I want to lead up to this; that there is advantage in having trunk wires overhead, and that there is no disadvantage in having local wires underground. The reason is this, that an underground wire, like a cable, retards the electric current; it checks the rate of flow of the electric current, just like the effect of iron; it absorbs those minute electrical waves that give the difference between one voice and another; it, in fact, chokes speech. It is not unlike speaking through a long speaking tube. When you speak through a long speaking tube the voice comes burring out at the end, and it is very difficult to distinguish the different words. Through a short tube nothing of the kind occurs; but where we have submarine cables, and where we have wires underground of any length, then it spoils this individual identification, and it impairs good working very much. This is due to an electrical quality which may almost be called friction, but it is a quality which we cannot entirely remove; we can only reduce it. It is called the capacity of a wire for retaining its charge of electricity. Its laws are thoroughly well known. We can measure the capacity of any wire, and we know how to reduce it, but we cannot remove it altogether. If we were to put the wires in all towns underground

*Chairman*—continued.

underground, and Glasgow, for instance, were put through to Plymouth through Carlisle, Leeds, Birmingham, Bristol, if all those places had underground wires on the trunk system the result would be that the sum of all these short lengths of underground wires would retard the current, blur the speech, and impair the trunk wire working. If you take any one of these places by itself, this effect is not sufficiently large to produce defective working; it is only when you sum them all up that you impair this mode of working.

2588. May we take it that generally speaking, for long distances, overhead is distinctly superior to underground?—Distinctly superior; and for that large system of trunk lines shown in yellow upon that map, which we are now putting up as fast as we can, it is absolutely essential it should be maintained overground.

Sir *Julian Goldsmid.*

2589. And there is an enormous difference in cost, is there not?—No, Sir; the difference is not serious at all; I am going to give you the prices presently.

*Chairman.*

2590. I believe the London-Paris telephone, which I imagine is one of the best long distance telephones in existence, is wholly overground, is it not?—It is wholly overground with the exception of the Channel, through the cable. In Paris the subscribers' wires are underground, and so are the subscribers' wires in London.

2591. But have the Department in London acted upon a different principle with regard to the Paris telephone in getting out of London to what they have with regard to telegraph wires?—They have.

2592. Because they felt sure that overhead was superior for that purpose?—Yes. We have overhead wires to the Stock Exchange, the Post Office and Cannon-street, and also overhead all the way to St. Margaret's, and from Calais to Paris they are overhead the whole way. I was going to add, Sir, that we are improving very rapidly this defect, or rather we are reducing it.

2593. The defect of what?—Of the capacity in underground wires that leads to this retardation; and a very striking, indeed a very great, advance has been made (it originated in America), that is, by the introduction of paper. Paper is now being introduced, instead of gutta-percha, to insulate the wire. The result is that it has reduced this disturbing element to quite one-fourth. Wires now coated with paper are certainly giving effects that are quite one-fourth the effect of the gutta-percha. Of course the result is this, that we can use four times the length of underground work with this paper cable than we can with the gutta-percha cable.

2594. With the same amount of resistance or disadvantage?—With the same amount of resistance, the same amount of disadvantage.

2595. And also a reduction in cost?—And also a reduction in cost. The reduction in cost is very considerable indeed. The price of underground work when covered with gutta-percha was practically prohibitive. The price of gutta-percha has been going up very much indeed. Instead of getting gutta-percha as we have for some years for about 10*l.* or 11*l.* a mile, we have now to pay 16*l.*, 17*l.*, or 18*l.* a mile, and the price is still going up; but this introduction of paper when applied to cables containing a great number of wires, brings the price of underground work so low, that the difference between that and overhead virtually disappears. It is still more costly because the pipes and the culverts and the conduits, and those other things, add considerably to the cost.



*Chairman*—continued.

Sir *James Fergusson.*

2596. Would you say what is the price per mile as compared with the figures you gave just now for the gutta-percha?—The price per mile per circuit, for a double circuit, on a line of 3-inch pipes filled with conductors for gutta-percha, is 55*l.* 12*s.*, and for paper 18*l.*

Sir *Julian Goldsmid.*

2597. And overhead?—Overhead would be about 16*l.*; 15*l.* or 16*l.*

Sir *Charles Cameron.*

2598. Per mile?—Per mile.

*Chairman.*

2599. When you say per circuit per mile, if there were several circuits in the same pipe, of course the expense would not be double or treble or increase proportionately to the number of circuits. You say per circuit per mile?—Yes, because that is a double wire.

2600. Suppose you put a large number of circuits in the same pipe, the increased cost would be comparatively small?—Yes, but I have taken a pipe full.

2601. You have taken a pipe full?—Yes, I have taken a 3-inch pipe filled with gutta-percha and a 3-inch pipe filled with paper. If you compared merely a circuit of gutta-percha with a circuit of paper the overhead comparison would be very different; then the overhead would be much cheaper. A 3-inch pipe with gutta-percha carries about 84 wires, a 3-inch pipe for lead-covered cable carries about 200.

Sir *Julian Goldsmid.*

2602. Carrying a great number is a great economy then?—Yes. It really comes to this, that while it is impossible to put underground work where you have six or eight or ten wires owing to the price, where you come to deal with 100 or 200 wires, then it may turn out that it is cheaper to go underground than overground.

*Chairman.*

2603. That would apply especially, I suppose, to junction wires where you may have a large number?—Yes.

2604. Have you had sufficient experience of the paper as an alternative to the gutta-percha to say what the length of the life of paper is comparatively speaking?—Yes; we have got now quite 10 years experience of the use of paper; it was adopted five years ago generally in the United States. Three years ago, when I was there, I went into it very thoroughly; and we have had experience of it ourselves now for

*Chairman*—continued.

about five years; we have used it exclusively for the trunk wires, and I have absolute confidence in its durability. It is a curious fact that there is not a single instance either in the United States or in France (where it is also largely used) of a failure of the paper cable. We all know how durable it is even in our libraries. Where paper can be kept dry, it does not decay. The whole secret of this paper for insulating purposes is the art of keeping it dry. It is placed in lead pipes; these lead pipes are hermetically closed, and water does not get in. If water did get in the paper would decay rapidly, and if water did get in, it would break down the circuit rapidly. But if water got in it would break all the wires down, and that would enable us at once to find out where the fault was; during one night the cable could be repaired, and we should be all right the next morning.

2605. It is as durable as gutta-percha?—More so, Sir. Paper if it can be kept dry will last for a thousand years, but gutta-percha has only a very limited period of life.

2606. Generally you have given us the result of your experience with regard to overhead and underground systems; is the overhead system equally applicable to the twin wire metallic circuit?—Equally.

2607. As to the single wire?—Yes, for a few wires.

2608. But apart from the number of wires an overhead arrangement is equally applicable to the twin wire as to the single wire?—Certainly.

2609. The Committee have heard that the department are taking over on the 1st July the trunk wire system of the Telephone Company; would you describe the general system of trunk wires and the action the department has taken since 1892 when the agreement was entered into by the department?—I will.

Sir *Julian Goldsmid.*

2610. Would you mind finishing the question of the single wire system and of the metallic circuit system before you go to that. Mr. Provand stated to us just now that the single wire system never could be satisfactory, and never could work well under any circumstances, and that is the reason why you must always have a double wire system; I should like to know your exact opinion as to that?—That expresses my view, Sir, almost exactly. I do not think it is possible to make any telephone system perfect unless it be a twin wire and metallic circuit. There has been plenty of evidence before the Committee to justify that conclusion, and that is my practical experience.

2611. And that is being done, is it not, throughout all the important towns of England?—I believe so. From my own personal knowledge I know it is done in Newcastle and in Hull; we have heard to-day that it has been introduced in Glasgow; they are under agreement with the Manchester Corporation to introduce it in Manchester, and as far as I know it is universal in London; at any rate they have been for a long time proceeding as fast as possible to duplicate all the wires, and the exchange you visited yesterday is entirely metallic circuit.

2612. But of necessity it would take a considerable time to duplicate?—Oh, yes, a very long time.

Sir *Julian Goldsmid*—continued.

2613. Consequently if complaints were made in localities of the single wire system it would probably be mainly because they have not had time there to put it in?—I should say so.

*Chairman.*

2614. Now with regard to the trunk wire system?—The trunk wire system, as far as it is erected now, is shown on that map by those yellow lines. Those yellow lines indicate the trunk wires as far as they are complete. By next Tuesday it will be possible to complete another line from Leeds to London, so that then we shall have from London right up to Glasgow what we call the backbone of the whole system. The trunk system itself was based on the idea that Leeds being the most central town in the country should be made the exchange for the trunk wire system, and all the trunk lines centre at Leeds.

2615. You are now describing what you call the "backbone system," which is the system provided by the department?—Yes.

2616. And which is quite independent of such trunk wires as the company had up to the time the agreement was entered into?—Yes, quite. I am speaking solely of the Post Office system.

Sir *James Fergusson.*

2617. That map is simply furnished by the telephone company?—That belongs to the telephone company; I only make use of it because it happens to be there.

2618. Are the lines shown in yellow there your lines or those of the telephone company?—Our lines; those in yellow, it mentions it at the top: Post Office trunk lines yellow; National Telephone Company's trunk lines red; junction lines black. Then all those lines are being constructed with very heavy copper quite up to date in everything, and I have every reason to believe that speaking through them will be as nearly perfect as it can be.

2619. When you say "very heavy" do you mean 80 lbs.?—The main backbone line is composed of copper that weighs 800 lbs. to the mile. That is heavier than any line has ever been constructed before; and subsidiary ones down to Plymouth and other places are built, some of 600 lbs. and some of 400 lbs.

2620. That is, as compared with 40 in exchanges, I suppose?—Forty lbs. in the underground work; but it compares rather with 150 and 200 lbs., which is usually used for pole lines.

Mr. *John Ellis.*

2621. I suppose those are being constructed out of the million sterling voted in 1892?—Yes.

*Chairman.*

2622. You have mentioned an independent system of trunk wires from London to Leeds, and in addition to that, I think, there is also a system which is well in hand between London and Bristol, taking Southampton and Portsmouth on its way?—Yes, Sir, it is shown on that map We are now constructing a subsidiary line from London through Basingstoke, to Salisbury, Southampton

*Chairman*—continued.

Southampton and Portsmouth on the one side, and to Bristol on the other; and then it will connect with the Plymouth and Exeter lines through Bristol, Southampton, and to Portsmouth. Then there is another one also to Ipswich and to Colchester, which we propose to extend to Lowestoft and Yarmouth. I may say we have already spoken from the end of the Hampstead-road tunnel from London to Belfast and to Dublin. Matters are not quite so perfect at Dublin as I should wish, there is something wrong there, I do not know what yet, but between London and Belfast the speaking is quite as perfect as it is between the City and Westminster.

2623. And, I believe, officers of the Department have spoken from Plymouth to Dublin?—We have spoken from Plymouth to Dublin through Leeds and Glasgow; from Plymouth through Bristol, Birmingham, Leeds, Glasgow, and back to Stranraer and Belfast.

Sir *Julian Goldsmid.*

2624. What distance would that be?—One thousand seven hundred miles.

*Chairman.*

2625. Is that a record performance, so far as you know?—It is a record performance, certainly, on this side of the Atlantic; I think they have exceeded it in America.

Sir *Julian Goldsmid.*

2626. It shows what can be done?—It shows what can be done, and I have every confidence myself that there will be no difficulty whatever in every principal town of this country speaking perfectly easily with every other town; and more than that, I do not at all agree with some evidence you have heard here this morning. My belief is that these wires will be enormously used, and that before another 12 months or two years we shall probably have to duplicate many of them.

Sir *Charles Cameron.*

2627. May I ask a question about the backbone system; on that map there is no yellow line between London and Birmingham; there is a large cut off there?—Yes.

*Chairman.*

2628. It is not finished yet, is it?—No; between Birmingham and London we have not yet decided what line to construct, because we do not know yet what trunk wires we shall take over from the company; the experts engaged are now surveying the whole of the country, and there is little doubt that we shall have a good trunk line between London, Birmingham, Warrington, and right up to Carlisle.

Sir *Charles Cameron.*

2629. You mean something much more modern and better than the present trunk wire?—Yes. What you see on that map is really what we have done up to the present. During the present year we shall continue carrying out the system, and one part of the system will be to complete the link between London, Birmingham, Warrington, and Liverpool.

*Chairman.*

2630. I think the Committee would like some figures indicating the growth of business; you have mentioned your own opinion that the trunk-wire system will be much more largely used; I believe you have some figures showing the increase of telephone business generally in the United States?—Yes; I visited the United States in 1893, and I made to you a report on the whole of the matter. I got together a vast mass of statistics, and I can give some figures showing the growth of telephony in the United States between that time and the time of my previous visit, that was in 1884. I visited there in 1877, in 1884, and in 1893. In 1884 the miles of wire were 115,000 (I will not give the units); in 1893 there were 440,000 miles, and on the first of this year they had increased to 577,000; so that in the 10 years since my first visit the wire has grown from 115,000 to 577,000 miles.

2631. That is the total number of miles of wires belonging to all the companies?—Belonging to all the companies; it is the total mileage of wire.

Sir *James Fergusson.*

2632. The telephone service in America is entirely in the hands of private companies, is it not?—Entirely. The miles of underground wire in 1884 were *nil;* there was absolutely not a mile of underground wire in the United States in 1884; in 1893 there were 91,000 miles of underground wire, and at the commencement of this year there were 148,000 miles of underground wire. The telephones in use were, in 1884, 325,000; now (in 1895) they are 582,000. These figures are taken from the returns of the Telephone Company. There they call the receiver one instrument and the transmitter another instrument, so that to draw a comparison between ourselves and the Telephone Company in America you must divide that by two; so that it means that there are 291,000 telephones in our meaning of the word in America. In 1884 there were 123,000 subscribers; in 1893 there were 232,000 subscribers; I have not got the number for now, but it must be virtually about 280,000 subscribers. Of course everything else has grown in the same ratio except exchanges. The staff employed has grown from 4,000 to 11,000; the talks from 215,000,000 to 670,000,000 per annum. The telephone exchanges, which were, in 1884, 1,325, are in 1895 only 1,439, so there has been only a growth of 114 exchanges in the 10 years; that is because they are centralising; the tendency there is rather to centre everything upon these few exchanges.

2633. That is to say, to increase the number of subscribers at each exchange?—To increase the number of subscribers at each.

Sir *Julian Goldsmid.*

2634. They find it is easier for communication, or more rapid?—I think it is more rapid. It is a question of efficiency of service. I can give an indication of one day's work, which is rather interesting, to show the enormous use that is made of the telephone. This is on one Saturday. It was indicated to me as a stormy Saturday. In Chicago Saturday is a great day for the Chicagoans to go on to the lake and into the forests,

Sir *Julian Goldsmid*—continued.

forests, and they make all kinds of appointments. There came a stormy Saturday, and on that day 153,807 calls were made and answered; 307,000 persons were placed in communication with each other. That is in one city in the States.

2635. How many exchanges are there at Chicago, do you know?—Fifteen. There are four new ones; there were 11 when I was there in 1884; they have now increased to 15.

*Chairman.*

2636. I believe in Chicago very many business houses have a considerable number of circuits?—Yes; one firm there has as many as six circuits; and most busy houses there have two. They find it necessary to have an incoming and an outgoing, a "double-track" telephone, as they call it. They use the telephone so much that they find it there an absolute necessity to have that "double track" for convenience.

2637. They would have six telephones side by side in the same office?—Side by side.

2638. Not like the Glasgow witnesses, some of whom we heard had 10 or 15 telephones connecting their different offices?—Oh, no; these are side by side; but two or three, I think, are to be found also in Glasgow and in Liverpool. It is no unusual thing for a very busy house to have two or three.

2639. Two or three telephones together?—Yes, but in Chicago there are as many as six. Of course, sir, we must remember this, that in Chicago climatic influences have considerable influence on the use of the telephone, the sudden changes. The habits of life and the peculiar way in which Americans transact their business lend themselves rather more to telephones than they do here.

Sir *Julian Goldsmid.*

2640. And fogs from the lake, I suppose, in America make a difference?—I do not know that there are fogs from the lake.

2641. There are tremendous fogs from the lakes?—I was not aware of it.

Mr. *Benn.*

2642. The superficial area of Chicago is very large, is it not?—It is very large indeed.

2643. Have you the figures?—No.

2644. It extends many miles one way?—Yes; I believe they have extended it solely to be able to say they have a greater area than Philadelphia; and Philadelphia extended their area in order to be able to say that they had a greater area than London.

2645. The 15 exchanges would be spread over a considerable distance, would they not?—As a matter of fact they are not extended over a considerable area. There are two or three small ones that are outside, at places called Wentworth and Pullman; one contains 75, the other 49, subscribers.

*Chairman.*

2646. You have some evidence, I think, with regard to the extension and development of the telephone business in Paris and in France?—Yes; on the 11th March I visited Paris, and I inspected the exchange there; I got all the information that I could collect, that might have been valuable to us, and I find there that a very considerable growth of business has taken place. In 1889 the business of the Telephone Company was transferred to the State; in 1880 there were 300 subscribers in Paris; in 1884 these amounted to 3,700; in 1889 there were 6,265 subscribers, and the subscription was 600 francs, or 24*l.* a year. At that time the service was transferred to the State. The business at once increased. The subscription was reduced from 600 francs to 400 francs; that is, from 24*l.* to 16*l.* In 1891 the 6,265 subscribers became 9,653. In 1894 (that is 31st December), there were 14,041 subscribers in Paris. In the same time in the provinces, the 11 companies and 29 State exchanges grew up to 257. There are 14,067 subscribers in the provinces; so that now the total number of subscribers under the State telephones in France is 28,108.

Mr. *Benn.*

2647. The number in Paris is one-half nearly?—It is almost exactly one-half in Paris.

*Chairman.*

2648. Do you know the terms upon which the State took over the system from the company?—I do not; I think Mr. Lamb does, and when he is called again, he will be able to give you the terms.

2649. What system of wires have they in Paris?—They are metallic circuits invariably.

2650. In Paris?—In Paris, and underground.

2651. And in the provinces?—In Paris there is a peculiarity that does not exist in any other place, that is, there are enormous underground sewers (they are subways), along which all these wires are carried; there is no excavation of the streets, no disturbance of the streets. Nearly the whole of Paris is served by this system.

2652. But the objections you have mentioned to the underground system equally apply to subways of that kind?—Exactly the same. In Paris they have followed the American practice of switch-boards; in fact they sent their officials over there to acquire a thorough knowledge of the system in the United States.

Sir *Julian Goldsmid.*

2653. The cost would be a little less, would it not, of putting them in the subways?—Yes.

*Chairman.*

2654. With regard to the operations at an exchange, as divided between the local and the junction and the trunk wire, would you describe the general operation?—The operations at an exchange are divided into three classes. The first is that which is local solely. That is the operation of putting a local subscriber through to another local subscriber. That is a simple operation very rapidly performed. Then the second system is putting a subscriber through to a subscriber in another part of the area through two exchanges and by means of the junction wires. The third system is to put a local subscriber through to a trunk subscriber; either through another exchange or directly from the central exchange. I have got copies of some curves here which I can give the Members of the Committee. (*The same was handed in*). That curve, sir, that I give

*Chairman*—continued.

I give you is what we call a 'load" curve. The object in giving it to the Committee is simply to show them how the work is spread over the different hours of the day. You will find that before nine o'clock in the morning there is little or nothing done; nobody thinks of telephoning.

2655. Where is this taken from, is it taken from London, or some other place in England?—I really did introduce it simply as an indication of what an exchange is; and I am bound to confess to the Committee that I am doing it without authority; I ought to have got the consent of the National Telephone Company; but it is one that I surreptitiously obtained when I visited Leeds the other day.

Sir *James Fergusson.*

2656. Is it one exchange?—It is one exchange. It so illustrates what I want to say that it really does not much matter whether it is taken from America or from Paris or from Leeds or anywhere else; it really is from Leeds. I think one of the days represented there was a Saturday; it is not a very busy day.

Mr. *Solicitor General.*

2657. Which is the Saturday?—It is January the 10th.

*Chairman.*

2658. January 9th and 10th, this diagram represents?—Yes; January 9th and 10th; I am not quite sure what days they were. It is a Wednesday and Thursday, not a Saturday. I only want it to illustrate the fact that the work is so unequally distributed over the different hours of the day. At eleven or half-past eleven in the morning and at three or four in the afternoon you will find there is always the maximum number of messages. It is exactly the same in the United States; and this curve which you see here would apply, I think, not only to every single exchange in this country, but to all countries where habits of luncheon hours and early dinners are prevalent as they are in America and with us.

2659. But that would apply, would it not, more particularly to commercial telephone centres?—It does; the telephone is almost entirely used by commercial men. The point here is that the whole work of the exchange is virtually centred in those few hours. In the early hours of the morning and at night there is virtually nothing done, although they must maintain the service.

2660. Is that the experience of the Post Office in the case of the Paris Telephone?—In the case of the Paris Telephone that is not quite the case, because the Paris telephone is used so much at night for press purposes, so that the use of the Paris telephone is spread over all the hours of the day.

2661. You were going to give us some evidence of the maximum number of three-minute conversations, I think?—When I was in the United States I took a great deal of pains to find out how many talks we could get through a circuit in a day. Of course, if you take one single hour we can get a great many talks, but if you were to take a day of 12 hours you would, perhaps, multiply in your mind the number of messages per hour for the 12 hours, and find that the number of messages on your trunk circuit



*Chairman*—continued.

was very few indeed. As a matter of fact, owing to business concentrating itself in these few hours, the result is that the number of messages that it is possible to send through a trunk wire is very small. Now, in the States, the maximum number of calls in that period is 80 on a local circuit, and 60 on a trunk circuit; the maximum number in a particular hour is, on a local circuit, 24, and on a trunk circuit, 18. Those figures I have taken as a standard to estimate the amount of work done, and to show how the work is done on our own circuits.

Sir *Charles Cameron.*

2662. Do not you think you would have a different curve on long inter-town circuits, say, between Glasgow, Edinburgh, and London, after post hours?—I think it is very likely. I think, taking it between London and Glasgow, the amount of business transacted will be so great that it cannot all be dealt with at the same time; subscribers will have to take their turn, and sometimes you may have to wait, on a busy trunk line, an hour before you can get your turn. Then it would alter the curve.

2663. The curve would vary?—It would vary through that; it would flatten it out.

*Chairman.*

2664. We have had some evidence given with regard to the increased expense consequent upon a larger number of subscribers; can you give us evidence, to begin with, with regard to the operations which are necessary in the exchange per call?—Yes, sir. The number of complete operations in an exchange (that is, what is done from the moment a subscriber calls to the moment he is in communication with his correspondent) for a local call involves three distinct complete operations; the operator is called; he tests; he answers and receives his instructions; he then tests to see if the correspondent's wire is clear or not, and he places his plug in communication and rings the subscriber and listens. If the subscriber answers he knows the two are in correspondence, and the whole thing is done. That involves three distinct complete operations, and the time that it takes to complete those operations depends almost entirely upon the skill and the experience and the handiness of the operator in the first instance; but a great deal more upon the attention of the subscriber. Half the troubles in telephone working are really due to the subscriber and not to the exchange operator. That is with the local call. Where there is an exchange intervene—(two exchanges)—and you have to use a junction wire the number of complete operations is six. Of course that means that there is a little more delay in getting through although you get through promptly because you are dealing with your own operators. Trunk working involves, also, when it is through one exchange, twelve complete operations, through two exchanges sixteen, and where you come to three exchanges it is still more; but the time occupied in the work at the exchanges, although the operations are more numerous, is less; they are done much more rapidly. The call system that I mentioned at first (the Law system) is used, and although

*Chairman*—continued.

on working the exchange there are 12 distinct operations, there is no reason why the time occupied should be more than that occupied in local working. I have somewhere or other an extract from a letter from the United States of America where it says: "We are now certainly showing that it is just as easy to trunk a message as it is to make direct connection."

2665. Is that partly due to the fact that in getting through an exchange on the trunk wire the operator is communicating with another skilled operator instead of very likely with an unskilled subscriber?—Yes.

Sir *Charles Cameron.*

2666. That letter is from an expert, is it?—Yes; it is from the manager of a telephone system in Chicago.

Sir *Julian Goldsmid.*

2667. There is one point I want explained; that is why so much depends upon the subscriber?—We have heard complaints here against the working of the telephone system in London, which are clearly due to the fact that the subscribers are engaged. The telephone company cannot help that. At the Post Office we often have complaints that they cannot get through to certain subscribers, the reason simply being that the subscribers do not attend to the calls: the fault is with the subscribers themselves. The telephone system is regarded in a totally different way here to what it is in the United States. Subscribers in England, it does not matter whether on the telephone company's exchange or on the Post Office exchange, will not associate themselves with the system. If anything goes wrong they grumble and growl, but do not do their best to assist the telephone company or the Post Office in having the work properly conducted. We have a technical term in telephoning work which we call "the lag of the customer"; it is one of the elements of delay which must be taken into consideration; and in forming an opinion of the relative perfection of telephone working, particularly when you compare America with England, you must remember that in America the subscribers all look upon themselves as part and parcel of the system, they do all they can to assist the telephone companies; whereas in England (I am speaking from my own experience more in the Post Office, I am afraid we do not get much help from subscribers.

2668. Is not there another point (you have so much experience of this that I should like your opinion), that is, that in a great many cases the subscriber does not answer because he is already engaged on his one telephone with somebody else, and consequently cannot begin a fresh conversation?—Certainly.

2669. And it may last some time?—Certainly; that is a very frequent thing.

Sir *James Fergusson.*

2670. Can it be avoided, with any conceivable system, that there should not be delays of five or ten minutes in getting "on" at the busy time of the day?—It is quite impossible. There must be delay, and it is because of the delay that busy houses have been forced to have two, three, and six circuits to conduct their business.

Sir *James Fergusson*—continued.

2671. If you were running the whole country yourself, you could not hope to avoid there being delays of that kind, could you?—Quite so; it would be absolutely impossible.

Sir *Julian Goldsmid.*

2672. Then is there not also a class of subscriber who shuts down his telephone every day, I believe at luncheon time; I have heard of them?—Yes. We had at the Post Office in Newcastle at one time a signal which was "Subscriber in" "Subscriber out." It was the same kind of an indicator I referred to before, like that (*describing*); when in *that* direction it was "Subscriber in"; when in *that* direction it was "Subscriber out." The subscriber simply had to turn a switch when he left the office, and the signal was made. We found very few that used it. It was practically valueless because they would not use it, and we abandoned it.

2673. And when the subscriber was out no attention was paid to the telephone?—That is very often the case.

*Chairman.*

2674. I understand that each operation you describe means the occupation of time?—Each operation means the occupation of time, and, of course, the time occupied grows with the number of subscribers to any exchange.

2675. But before coming to that, we have had a good deal of evidence on the subject of two competing systems in the same area. Those two competing systems would mean, would they not, an increased number of exchange connections?—Yes; between themselves.

2676. The subscribers of one system wanting to get into communication with subscribers of another system?—Certainly.

2677. Would not that mean increased delay?—It would mean increased delay, of course.

2678. And the efficiency of the business would necessarily be injured?—Yes. The point I am trying to lead up to here is that you must necessarily have a certain number of operations connected with each call; that those operations involve time, and the fewer the exchanges and the fewer the operations the better can the business be done and the greater the number of messages got through.

2679. I understand that in America they have been increasing the number of subscribers per exchange with a view to lessening the number of exchange operations?—No; the operation they are doing there is rather increasing the number of exchanges, decentralising.

2680. I think I understood you to say that the number of exchanges in America had hardly increased at all, notwithstanding the large number of subscribers on the telephone system?—Yes, I gave that in answer to a question about the curious fact that the number of exchanges in America had not increased; but I also mentioned (or I am afraid I did not mention, but I ought to have mentioned) that in Chicago they are finding now that the introduction of the multiple board has so increased the number of difficulties that they have found it necessary to introduce the divided board, and the divided board has also led to an increase in the number of

*Chairman*—continued.

of exchanges in Chicago by four. I mentioned that there were eleven in 1884, and there are fifteen now. The object of the additional exchanges has been to maintain the number of subscribers in their central exchange as low as it can be kept.

Sir *Charles Cameron.*

2681. To keep it low?—Yes; they do not want to make their central exchanges (their multiple board exchanges) very large. The largest in Chicago is only just over 4,000.

*Chairman.*

2682. Then with regard to daily calls per circuit?—The daily calls per circuit vary very much. The average per day over the whole of the United States in 1893 was 8·03; at Chicago in one exchange it reached as many as 24. The mean for the whole town in January was 13·6, while in July it was 12·3. At Buffalo the mean is 6. At Boston the average in 1884 was 5; it is now 12·6. In Berlin the average daily calls are 12; in Leeds, 10 (I mentioned that before, I think); in Paris, 5; in London, 8.

Sir *Julian Goldsmid.*

2683. As to Berlin, may I ask one question: Berlin is a single-wire system, is not it?—I cannot answer that exactly. They have some peculiar system there at work that I do not quite understand. I have not been there, and I am not quite sure that it is a single wire pure and simple. I fancy it is some combination; I do not understand it.

2684. You do not know whether it works well or not?—No, I do not.

*Chairman.*

2685. Now with regard to the number of the lines per operator, leading up to the question you are coming to?—The number of lines per operator varies also very much on different systems and at different places, but at a busy exchange of say 4,000 subscribers it ought not to average more than for local work, 50; for junction work, 10; and for trunk work, 5.

Sir *Julian Goldsmid.*

2686. As to the 50, I suppose you want an experienced operator?—No; the experienced operator is wanted for the trunk. The operator has to watch the whole of the proceedings going on on the trunk circuit; she cannot leave it for a moment. The result is that in some places an operator is able to attend to 10; in other places, I know of one where they are able to attend to only three, but a fair average for a busy trunk circuit is five, and I do not think a good trunk operator can attend to more than five busy circuits.

*Chairman.*

2687. Will you give the figures with regard to two or three towns—Buffalo, Boston, and New York?—A point I wanted to bring out was that the larger the exchange the greater the number of talks per subscriber and the fewer the subscribers per operator, and, therefore, the greater the cost of working. I have shown you all the different operations. I have shown you the number that an operator can attend to, and I have drawn out *this* table for three towns in the United States—first Buffalo: the talks per day for each subscriber are six; the customers per operator are 100; the number of subscribers 2,240. In Boston: the talks per day for each subscriber are 12·6; the customers per operator, 70; the number of subscribers, 3,545. In New York (Cortlandt-street): the talks per day for each subscriber, 15, the customers per operator, 50; the number of subscribers, 4,500. So that we have roughly this—the exchanges increase 2, 3, 4; the customers per operator diminish 100, 70, 50; and the talks per day for each subscriber increase 6, 12, 15.

Sir *Charles Cameron.*

2688. And the cost; what is that?—I have not got that.

Sir *Julian Goldsmid.*

2689. The cost increased, of course?—The cost increases, of course.

*Chairman.*

2690. It is very important in the element of cost to take the number of operators?—Yes; the number of operators is the standard or the basis of the cost.

2691. Can you give us the standard in these different places?—Yes. The tariff at Buffalo is not an annual subscription; it is what they call a toll rate, and at Buffalo there is an installation charge of 70 dollars, which covers the first 500 messages; after that they pay (I think it is) eight cents a message of five minutes. In Boston (3,545 subscribers) the rate is 160 dollars for the metallic circuit; that is 32*l.* In New York (4,500 subscribers) the subscription is 240 dollars; that is nearly 50*l.* a year.

2692. That is to say, the larger number of subscribers is followed by a larger subscription charged in those cases?—Yes; but I think the increase of the subscriptions, or the subscriptions themselves, depend upon local circumstances altogether apart from the size of the exchanges.

Mr. *Benn.*

2693. May I ask would it not, in New York for instance, seriously affect the charge, the heavy expense the company have been compelled to submit to (recently, for instance), to put wires under streets, and all such charges?—Yes.

2694. The communication in Buffalo is a simple matter compared with that of New York, is it not?—That is one matter, certainly.

2695. So that it would be a local circumstance rather than an increase in the number of subscribers that would affect it?—Local circumstances would affect the subscription, but not the rate at which the work has been done.

Sir *Charles Cameron.*

2696. In Boston they reduced the charge, did they not?—At Buffalo the initial charge was 70 dollars.

2697. And eight cents for five minutes?—I think it is eight cents. I cannot find the reference

Sir *Charles Cameron*—continued.

ence to it here; I give it, I think, somewhere else.

Sir *Julian Goldsmid.*

2698. In any case the cost to the company will be more the more subscribers there are, as you say?—Certainly.

*Chairman.*

2699. Because the larger number of subscribers means a larger number of conversations per subscriber, and therefore a smaller number of subscribers to each operator?—That is so.

2700. And no doubt the cost of the operators, the staff, is a very important element in the cost of the service?—It is almost the standard from which all calculations of working expenses should be made.

2701. Would not the same argument apply to the increased cost of the mechanical work, which would increase in consequence of the larger number of subscribers?—The cost of the mechanical work (that is, engineering and maintenance) will increase, *pro ratâ*, with the number of subscribers and the number of circuits; but this increased cost would not follow exactly the same rate of growth as the other one.

2702. Do you mean it would be a *pro ratâ* increase?—It would be a *pro ratâ* increase. Whatever is the annual maintenance charge for one subscriber will be doubled for the second subscriber at the same spot.

2703. You are referring to wires, perhaps?—I am referring to circuits outside the exchange.

2704. When you come to mechanical work inside the exchange, the switch boards, what do you say?—With the multiple board the cost inside of fitting-up the exchange with a multiple switch and all its accessories, increases as the square of the number of subscribers; for instance, supposing you had a multiple board for 2,000 subscribers, and you doubled the number to 4,000 subscribers, the cost of the switch and its accessories would not be twice as much, it would be four times as much; and when you come to 10,000 switches (the number I spoke of at first) it is this growth which renders these large multiple switches prohibitive.

2705. That is so, not only with regard to the cost of staff, but the mechanical work inside the exchange; the cost to the company increases far more rapidly than the increase in proportion to the number of subscribers?—Certainly.

Mr. *Benn.*

2706. Is that why they have given up the multiple board, in Chicago?—I think that must be one cause. It is not mentioned in their correspondence, but I think that must be one cause why they are seeking for other means so to dispense with the multiple board.

*Chairman.*

2707. Does that fact make a comparison between London and the charge for the service in London, and the service in a place like Stockholm or Christiania somewhat inappropriate?—I think it has to be taken into serious consideration in drawing comparisons.

2708. Have you anything further to say upon that?—Yes; I should like to mention this point

*Chairman*—continued.

(I think it is a very important one, and one which the Committee should bear carefully in mind), that whatever may be the annual rental, the working expenses must increase with the number of sub-cribers; and therefore the balance between revenue and working cost must diminish; so that if the rental is too low, and the subscribers too many, the working expenses will exceed the rental, and rates will have to be increased; in fact sir, that is a point that has already been raised on the Continent; in Germany and in Switzerland.

2709. You have mentioned engineering expenses; what are they on the average per subscriber?—The average engineering expenses per subscriber amount to 3*l.*

2710. They amount to about 3*l.*?—About 3*l.* per subscriber. Of course, we have other expensive points, rent, taxes, wayleaves, royalty, headquarter charges, office expenses, interest, depreciation, holidays, and sick allowance; and all these things have to be added.

Sir *James Fergusson.*

2711. The 3*l.* is only for materials?—The 3*l.* is only engineering expenses.

*Chairman.*

2712. 3*l.* per annum?—3*l.* per annum per subscriber.

2713. That does not, of course, take into account the initial cost of putting up the circuit?—No.

2714. It is merely the engineering?—Merely the engineering and maintenance charges.

2715. Have you figures with regard to the cost of construction?—I have got a rough estimate. I cannot give the actual cost of construction, because it differs in many places; but I can give you an estimate based on experience, and one that I am quite sure is not far off the mark. The fact that I have got with which to support it is derived from Paris. In Paris the government find that the cost of construction per subscriber for their exchanges is 44*l.* My estimate for an underground system, a 5,000 subscriber exchange, is for London 55*l.* per subscriber, and for the provinces, 45*l.*

Sir *Julian Goldsmid.*

2716. Then when Mr. Provand talked about "15*l.*" he was talking about what he did not understand?—I suppose somebody was talking about what he did not understand, and I think the witness who gave the evidence must have misread "15*l.*" for 45*l.* That is the only explanation I can make of it.

*Chairman.*

2717. I think you have got some evidence with regard to the system in other countries which you propose to put in?—Mr. Lamb undertook to put in a schedule of tariffs and other things in compliance with the wishes of members of the Committee, and he has prepared a schedule giving the information that they want for Austria, Belgium, France, Germany, Hungary, Italy, Norway, Sweden, Switzerland, and the United States. It gives (1) the name of the country; (2) the fact whether the telephone

is

*Chairman*—continued.

is in the hands of public bodies or private companies; (3) it describes the system in use, and I see in Germany it is put down "single" for Berlin, but I am not quite certain as I have said that that is quite right; (4) area—the area covered; (5) the number of subscribers; (6) the terms of subscription; (7) statistics of capital and profit; and (8), the trunk, were charges. *This* will be printed in the Minutes.

2718. If you hand it in we might have it printed by next time?—Yes. (*The Table was handed in.*)

2719. I believe you also propose to put in, if the Committee approve, extracts from a letter that has been received from the Director General of Telegraphs in Sweden with regard to the Swedish system?—Yes, sir; may I first of all point out something with respect to that schedule: Of course when members of the Committee have the schedule before them they will see it, but I should like, if you will allow me, just to point out the basis of the various tariffs.

2720. Certainly?—You will find this, that there are three distinct bases on which the tariffs are formed—the first is a fixed annual rental with unlimited service; secondly, a smaller annual rental with a limited service and tolls for extra talks; and lastly, the Buffalo system, as I described it to you, where they charge tolls for every talk; the system there is by toll and not by annual subscription.

Sir *James Fergusson.*

2721. In case there was a mistake made let me put this to you: You named eight cents for three minutes as the Buffalo price, is not that incredibly low, it is less than 4*d.*?—It is per talk, sir, a local talk; we should think it very high in England.

2722. Oh, would you?—Certainly.

Sir *Julian Goldsmid.*

2723. Then there was a 70 dollars initial charge?—Seventy dollars initial charge to cover the cost of the apparatus, but I want to mention this, that the second plan, that is an annual rental with limited service, is now being used in New York. It has been introduced in New York, and I have a letter here from the President of the Metropolitan Telephone and Telegraph Company in which he says: "You will, doubtless, be interested to know that we are introducing here, with considerable success, a system of charges, measured by the amount of use made by each individual subscriber. We, of course, have an initial minimum, after which the subscriber pays a fixed amount per message for each communication. This is substantially on the same lines as the Buffalo system of charges with which I am sure you are quite familiar. The new plan seems to take with the public, especially the small users. We are not attempting at present to enforce it upon those who make excessive use of the telephone, and when we do I expect there will be considerable opposition to it."

Mr. *Benn.*

2724. Buffalo is entirely an overhead system, I think?—I am not quite sure; it was when I was there in 1884.

2725. I was there in November?—Then you perhaps know.

2726. Yes?—There is one remarkable fact about Buffalo; that is that the number of calls per day has not increased between 1884 and now, and it is the lowest number in the States, which rather tends to show that the toll checks the desire of subscribers to ask unnecessary questions, and it brings them within the limits of business talks.

Sir *Julian Goldsmid.*

2727. So Buffalo does not do quite so much business as the other places per head?—No; they do not per head.

*Chairman.*

2728. Have you anything more to say with regard to that statement?—No; but I have got this letter, or extract from a letter dated the 29th March 1895. It is a letter from Mr. Storckenfeldt, the Director-General of Telegraphs in Sweden: "Dear sir: In consequence of your telegrams, I beg to give you the following information. The private telephone company in Stockholm has obtained the right to work telephones within a district of 70 kilometres radius from Stockholm, but may not extend their operations out of this circle. This concession does not, however, exclude the State likewise from working telephones within the same district. In consequence, a competition has arisen, which works in all ways unfavourably and which has also entailed the result, that the fees have been brought down far below the proper ones. The private company has repealed all fees, which were previously paid, for conversations between the different telephone lines of the company; that is to say, all the subscribers of the company now converse with each other within the whole district without paying any other fee than the yearly one. Even for Swedish circumstances the fees, which the company take, are quite unreasonable for free conversation within so large a district; as I have before mentioned, they have arisen from the company's fear of competition with the State. The State's telephone fees are 80 kronor in the larger towns and in the country, and 50 kronor in the smaller towns. The subscribers have the right to converse with each other within their own system, and also with the subscribers in the subsidiary systems in the immediate vicinity. For conversation with subscribers in other systems a separate fee is paid amounting to 15 ore up to 100 kilometres, 30 ore up to 250 kilometres, 50 ore up to 600 kilometres, 75 ore up to 900 kilometres, and 1 kronor for beyond the latter distance, all for three minutes. We are endeavouring to restrict the districts within which one may converse free. The fees for conversations are quite too cheap in Sweden. The working of the telephone lies in the hands of the State over the whole country, except within the district named around Stockholm. In this district the State has at present about 3,300 subscribers, and in the other part of the country about 18,000

*Chairman*—continued.

subscribers. When the State first commenced its telephonic operations it was suggested that the State should erect the long connection lines and work these, whilst private companies should work the telephone system in the towns. This appeared, however, on nearer study, to occasion so great difficulties that the State decided to work the whole. For the company in Stockholm the right was allowed to converse on the long lines of the State for separate additional fees, a concession which has occasioned much unpleasantness and will occasion still more. Our experience is, therefore, that if full national telephone operations are to be arranged, the State must own the whole system; that is to say, the long lines as well as the local systems."

Sir *James Fergusson.*

2729. Is it the case that, under the London streets, could be laid pipes sufficient to carry a competing system of telephones; is there space of elbow to provide underground pipes for a competing system of telephones?—Yes, sir, I think there is.

2730. You think there is?—I think there is, with the exception perhaps of Cheapside, that is to be avoided.

Mr. *Benn.*

2731. There is a pipe there, is not there, already?—Cheapside is all pipes, I think.

Sir *James Fergusson.*

2732. But I mean a special pipe that is not utilised at present?—Yes, there are some pipes.

2733. I suppose that a certain difficulty had already been found by the Post Office in making their lines, by reason of the number of pipes laid under the streets?—Yes; in Newgate-street and Cheapside we experienced great difficulty indeed.

2734. But still it would not be insurmountable?—No, not insurmountable.

2735. I am not sure whether you have answered this question or not. Do you anticipate a great development of telephonic communication when the agreement comes into full working order?—I do.

Sir *Julian Goldsmid.*

2736. You referred to other costs besides engineering costs; you referred to way-leaves. Would not a competing company especially in a great town like London, find enormous difficulty with regard to its way-leaves?—Oh, enormous.

2737. Has not there been already in London, and in some of the other towns (possibly Newcastle), very great difficulty on that subject?—Everywhere; and in our case we found it impossible to get way-leaves for the overhead line for the new trunk system from the Post Office to Finchley-road; we had to give it up. We are obliged to put a short length of underground wire between the General Post Office and King's Cross.

*Tuesday, 7th May* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Captain Bagot. | Mr. Arnold Morley. |
| Mr. Baird. | Mr. Moulton. |
| Mr. Benn. | Mr. Snape. |
| Mr. John Ellis. | Mr. Solicitor General. |
| Sir James Fergusson. | Lord Stanley. |
| Mr. Grant Lawson. | Mr. Tully. |

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Mr. WILLIAM HENRY PREECE, C.B., F.R.S., again called in; and further Examined.

*Chairman.*

2738. I UNDERSTAND there are two omissions you wish to fill in?—Yes, sir. I quite forgot to mention, when speaking of the switchboard, that in America, and in Europe also, attempts are being made to supplant manual labour at Exchanges by making automatic switches, so that a subscriber will be able to call up another subscriber by two or three motions of a switch in his office. I saw such a thing at work some years ago near Brussels, and I also saw one exhibited at Chicago; I believe the one near Brussels is still at work; but all these automatic switches are based on the erroneous assumption that the line is always in working order, that it is always disengaged, and that the subscriber is always present, and I fear those three fallacies will prevent its general adoption; and it can only be used on very small exchanges.

2739. You do not think it will be applicable to a large exchange, such as we have in London?—Not for large exchanges certainly, sir. The other point is, that I quite forgot also to mention that in America, instead of the visual signal that I explained to the Committee, they have introduced a little electric lamp. Whenever a subscriber lifts the telephone receiver off the hook a little lamp lights in front of the answering operator, and it remains alight until he has answered; it goes out while the talk is taking place, and the moment the conversation is finished the little lamp lights up again. The great advantage of these automatic signals is this: that it entirely puts a stop to those questions that irritate us very much, when the female voice comes in the middle of a conversation and asks us if we have finished, or, as they say in the States: "Are you through?" These automatic signals entirely put a stop to these questions. There is also one other thing, sir, I should mention.

2740. Before you leave the electric lamp, are you aware whether that has been successful in operation?—Oh, yes, it is very successful indeed, and it is introduced very generally in Chicago; it has also been introduced in Boston, and is gradually spreading throughout the States.

Sir *James Fergusson.*

2741. I suppose you would be the last man to say that it was impossible that a good automatic system might be invented?—The word "impossible," sir, does not exist in the vocabulary of an electrician; we believe everything to be possible; at the same time there are great difficulties to surmount.

*Chairman.*

2742. What happens if the current of electricity for the lamp ceases, or if the lamp itself gets out of order?—Then it is a fault that leads to a little trouble and delay.

2743. Can it be replaced temporarily by some other means?—I think not. It depends, of course, on examination and testing; just as in the present day our indicators require to be tested always, when operators come on duty.

2744. Does the electric lamp require an additional wire between the subscriber and the operator?—No; it is part and parcel of the speaking wire in connection with the plugs and cord at the station.

2745. Then there is no greater expense in the original outlay; but it does save the inconvenience of the voice and the calls?—Yes, that is so. There is one other return, sir, that I could not find the other day that I wish to put on the minutes. It is the population in various large towns in the States, and the number of subscribers compared with the number of inhabitants to each subscriber. It has been mentioned two or three times. It shows that in New York the number of inhabitants to each subscriber is 145, while it runs through various stages; in Detroit 48, and it goes down to Providence, where there are 44 inhabitants to each subscriber. (*The document was handed in*).

2746. And that, notwithstanding that the rates charged in America are very high?—That is so.

2747. How do you account for that fact, as compared with our experience here?—Because it is so essential to the transaction of business in the States.

2748. More so than in England?—More so; the habits of the people and the difficulties of

*Chairman*—continued.

locomotion, the temperature, the climatic influences there, render it almost essential to them to conduct their business indoors; and they use it very largely, indeed, for that purpose.

2749. That is supplementary, is it, to the schedule you put in which you described shortly before?—Yes, sir; but I put it in because a question was asked me. I have not had time to look through the report of the evidence that I gave; but I mentioned that I had such a return. I searched for it, and could not find it. Now I have found it, and so put it in.

2750. Does this schedule contain all the information which the department has been able to get up to the present time with regard to the system of telephones in the various countries referred to in the first column?—That is so.

2751. Then I think you also put in some extracts from correspondence which has taken place between the Post Office and the Director General of Telegraphs in Sweden?—Yes, sir; and that is printed.

2752. Then will you now continue the evidence you were giving; I think you stated the basis of the various tariffs in America and Europe?—Yes.

2753. Will you just repeat them?—I pointed out on the tariff that there were three systems: one based on a fixed annual rental, with unlimited service; the second, a smaller annual rental, with limited service, and tolls for extra talks; and, thirdly, tolls per talk, a system which we propose to introduce in the trunk services here, and that is the one in use at Buffalo. The second plan is now being tried in New York; and I read an extract from a letter implying that it was there received with great favour.

2754. I understand those systems of charging apply to local areas in various countries?—They apply to local areas. I should just like to mention this upon that toll system: I point out that in Buffalo the number of talks is only six, and the tendency of the tariff per talk is to reduce the number of conversations by stopping useless conversations.

2755. Do you think it unduly checks the use of the telephone?—No. I am rather an advocate for the toll system, limited as they have it in New York, that is with a small rental, and a small charge per talk, really in order to check the unnecessary use of the telephone. I am sure everybody who has a telephone must be perfectly aware of the fact that he is called up a great deal too frequently to be asked very trivial questions.

2756. I think you stated on the last occasion that the intelligent use of the telephone by the subscriber was a very important factor in a successful system?—Yes; they recognise this so much in the States that not only do they look after the education of the staff itself in the exchange, but they have inspectors who go round and educate their customers in the use of the telephone, and point out to them the various ways of using it. They encourage their subscribers as much as they possibly can to come to the exchanges and to see the working of the exchanges, so that the subscriber may be able

*Chairman*—continued.

to grasp the working of the whole system and become a part of it.

2757. Do you think there is need in this country for educational work of that kind?—Immense, sir. You have had plenty of evidence before you of the ignorance of the users of telephones in what goes on; and I think if some of those gentlemen who have appeared before you had received a little telephonic education they would have given different evidence.

2758. Then you attribute, to some extent at all events, the want of success in the working of the telephone in this country to that cause?—I do.

2759. Now, will you give the Committee your opinions upon the question of the municipalisation of the telephones?—Yes. I have five or six reasons that I should like to adduce before the Committee against the municipalisation of telephones. In the first place, I should like to point out that a fluctuating body like that of a town council is at a disadvantage in conducting what, to them, would be a growing, speculative, and competitive industry, which demands continuity of policy, uniformity of practice, and accumulation of experience to develope and to maintain in high efficiency. Secondly, high efficiency can only be maintained when the service pays. The active and determined opposition of an energetic company like the National Telephone Company, who could undercut prices in one part of their system to maintain their position in another part, certainly would prevent the possibility of local financial success.

2760. And would, at the same time, penalise the other parts where the price had to be unduly high to compensate for the loss in the particular locality?—Certainly. Again; financial failure and a call on the rates would speedily secure the opposition of the labouring and the employed class of the ratepayers who do not benefit by the use of the telephone, and who form the majority, and are, therefore, the masters of the situation. Fourth; high efficiency in telephony depends essentially on skilled labour and technical supervision. Small municipalities, isolated telephonically, cannot afford to pay high salaries to secure or retain the services of highly skilled technical men; nor have they the experience necessary to develope the technical education of the men they employ. They cannot compete in that respect with a widely developed and extensive service like that of the Post Office, where there is absolutely uniformity of practice, great means of development and of education, room for expansion, prospects of promotion, and ultimate retirement on pension.

2761. When you speak of the services of highly skilled technical men, you are not now referring to the operators at the exchange, are you?—Yes, sir, I am; I am referring to those in charge, rather; the supervisors.

2762. The supervisors?—Yes; they are gentlemen called managers, who necessarily must be, and are, technical men, and very highly so.

2763. And the electrical engineering staff?—The inspectors and the assistants to these managers are all engineering men who are highly trained. The fifth reason, sir, is that in all small

*Chairman*—continued.

small municipalities (I am dealing more with small municipalities than with large ones) not managed by these skilled men the service must deteriorate. There is no physical difficulty whatever in arranging for a local subscriber in one system to speak to a local subscriber in another system in the same town; but it is not likely that this can be done commercially, where there are different practices, probably ill-feeling, determined opposition, and certainly great rivalry. Moreover, if it were done it would lead to additional switch operations and financial checks, which mean additional delays in talking, necessary evils on a trunk system but insupportable on a local system. This is rather an important point, sir; and for the guidance of the Committee, I have had some diagrams drawn (*the diagrams were handed in*). I have taken the case of two towns marked "A" and "B," in each of which there is a post office where the trunk system terminates. At each post office there is a municipal exchange and also a National Telephone Company's exchange; and I have also added a local subscriber on the Post Office exchange. Now, on this diagram you can trace all the operations involved in speaking from one exchange to the other in the same area, or in speaking from one exchange in one area, to the other exchange in the other area through the trunk system, and I have drawn it particularly because I desire the Committee to see that where a local subscriber centres on the Post Office there must necessarily be removed the operations involved in passing through two exchanges.

2764. Perhaps you will just describe to the Committee the operations which have to be carried out in each case?—I gave that fully in the previous part of my evidence. I showed exactly what would have to be done, and I gave the number of operations. I showed, I think, that where one exchange spoke through a trunk to another exchange it might involve something like 24 operations; where there is one local exchange, the number of operations is three; where there is a mere junction, the number of operations is six, and where the talk is through one exchange the number is 12.

2765. One local exchange and a trunk?—Yes; and through one local exchange and two trunks there are 16 operations. I mentioned nothing about the time that these operations took, but I have a return showing the time occupied at one of the most perfect exchanges in New York, Cortlandt Street, where it appears that the extra time per exchange is over a minute; so that the insertion of any exchange in any one of these operations means an extra minute in the time occupied in the talk between a subscriber in one area and a subscriber in another area.

Mr. *Benn.*

2766. May I ask you whether this is not practically what takes place in London at the present time: for instance, suppose a subscriber in the East End wishes to communicate with another at Westminster, he has to be put through two or three exchanges in pretty much the same way?—It is so.

Mr. *Benn*—continued.

2767. It is so?—Yes

2768. So that what would happen here is not a greater complication than that which already exists in the London system?—Not much more.

*Chairman.*

2769. Does that conclude the reasons against municipalisation?—No, sir. I would wish further to point out that perfect trunk service can be obtained only with one uniform system, one *régime*, and one staff; that every additional system means enhanced expense, additional responsibilities, accumulated difficulties, and serious delays; and the centralisation of management in one central spot like London secures the knowledge and benefits of the wider experience; it encourages experiment and observation, and it furthers invention; it prevents repetition of errors; it checks the exercise of individual idiosyncrasies; it enforces technical education, and it tends to develop the industry; and those points, sir, are thoroughly, in my opinion, carried out by the Post Office system in England as well as by the American Bell Telephone Company in the United States, where they virtually have a monopoly.

2770. Those are arguments which you have directly addressed to the question of municipalisation?—They are what I address directly to the question of the municipalisation of telephones; and I should like to say, finally, on this point, sir, that the telephone itself is imperial in its character, and it is rapidly becoming international. More than that, local authorities who would find the difficulties I have enumerated in carrying out its conduct can, on their side, encourage the development of telephony very much by providing subways and conduits, and by facilitating way-leaves, and generally do much to conduct the business under proper control and regulation.

2771. Would most, if not all, of the reasons you have given against the municipalisation of the telephone apply equally forcibly to competition by private companies in the same area?—They would. There is one other reason, sir, I should like to give that I omitted.

2772. Certainly?—That is this: It must be obvious to the Committee that an agency already in existence with its plant, offices, and staff all ready can serve additional subscribers at less cost than a new agency which has everything to provide. The introduction of a second agency would necessarily involve additional managers and engineers, additional office accommodation, additional pipes for junction wires between London exchanges, and additional subscribers' wires in cases where the subscribers require to be on both exchanges; or if (as has been suggested in evidence) arrangements might be made for the two systems to work together, then additional wires to join these two systems and additional expenses for switching between the two systems. Indeed, sir, I am sorry to give you so many reasons, but there is one other I should like to mention.

Mr. *Benn.*

2773. Shall we call this No. 7?—Yes, please. It is this: that it is quite a fallacy to assume or

Mr. *Benn*—continued.

to imagine that in the event of competition only one side will run a low tariff and put down metallic circuits, or that all the new subscribers will flock to the newcomer, even though it be their own town council. The company in possession has 12 months' start, and it would adopt both measures, low tariff and metallic circuit, and many other things that are known in the art of financial self-defence; in fact, sir, I think there is not very much patriotism amongst ratepayers generally when the pocket is affected.

*Chairman.*

2774. What, in your opinion, would be the effect of competition, whether municipal or otherwise, upon the question of way-leaves?—The question of way-leaves is a very serious one indeed, and it is growing more and more serious every day. The Post Office is in this position: that it is subject to law and to the regulations of an Act of Parliament; but there are many concerns—telegraphists, bell-hangers, telegraph engineers, who are running up wires everywhere, and the streets of the City are being crossed without law. Over Cheapside, for instance, is one mass of wires, and I believe that $\frac{99}{100}$ths of those wires belong neither to the Telephone Company nor to any authorised body; certainly not to the Post Office. But in the country we have great difficulty; in fact, in London also. I mentioned that we failed to get way-leaves for an overground wire between the Post Office and King's Cross or St. Pancras to meet our new trunk system; we have been obliged to put our wires underground in consequence. Everywhere we are troubled with the difficulty of getting way-leave; owners of private property object because they find their property is being trespassed over; they are worried by linemen desiring to ascend the roofs of the houses and damaging the roofs; so that all over the country we are getting into trouble. I mentioned one case of the desire that local bodies have to force us underground, and I gave reasons why they should rather encourage us to go overground with the trunk system, although I mentioned that for local purposes we might go underground.

Mr. *Benn.*

2775. You rather favour underground for local purposes?—I do on a large scale; in fact, sir, there are two or three places where we really meet with great obstruction. The parish of Wandsworth has quite a crank on this particular subject; they not only try to force us underground, but they try to force the railway companies also, where they cross with bridges, to go underground. Sheffield is another place where they would have prevented our carrying the trunk wire into the Post Office if they could, in which case we should have isolated them from the trunk system.

*Chairman.*

2776. Has that difficulty been overcome?—No. We succeeded in getting private way-leaves into Sheffield; we dispensed with the local way-leave. Cambridge has the courage of its convictions, for it not only absolutely forbids us

*Chairman*—continued.

to go overground, but it pays the difference between overground and underground, in order that we should carry our wires underground to the post office there, whereas we shall be compelled to go overground for this trunk system; and if Cambridge does not give its consent, Cambridge will have to be left out of the trunk system. I mention this because I think town councils, and county councils particularly, can assist our operations very much indeed if they will facilitate the obtaining of way-leaves.

2777. One of the witnesses gave some evidence about the extension of the telephone in rural agricultural districts; have you any suggestion to make with regard to that?—Yes. Might I refer, before you go to that, sir, to New York?

2778. Certainly; yes?—I wish to refer to the underground system there because it was given in evidence here. We have also had evidence about the desire to put wires underground in the City of London. At New York there is a company which has established a subway throughout the whole of New York, and in this subway lets out space to the Telephone Companies; and by that means they have provided proper conduits all over New York for the use of the Telephone Companies; but having put these in the hands of a private company, this private company charges an exorbitant rent, and the New York subscribers have to pay 2*l.*, or an equal equivalent (eight or 10 dollars; I forget which) per head for the rental of the way-leaves.

Mr. *Benn.*

2779. That largely accounts for the New York tariff, does it not?—To a certain extent.

2780. Does not the same rule obtain through almost every stage of the enterprise?—In the States?

2781. Yes?—Very much so; but then we have had evidence here, sir, that the City of London authorities were rather encouraging the same thing in the City of London. We were told that the Electric Lighting Company wanted to charge the Telephone Company a rental of 10,000*l.* a year. Well, now, as there are only 4,000 subscribers in the City of London, that would mean 2*l.* 10*s.* per subscriber in the City of London if it were agreed to.

2782. That is in the City?—Yes.

*Chairman.*

2783. Now go on, please, with your statement?—You were asking, sir, about extensions to rural districts. These can be encouraged to a very large extent by county and district councils guaranteeing a sufficient income to meet the requirements of the Treasury; in fact, this is already done to a very large extent for telegraph offices. In some districts, in some parts of Wales particularly—in the mountains of Wales—there are several small offices opened under this guarantee given by a district council; but, curiously enough, sir, we have had some difficulty there in introducing the telephone. The rural people say: "We guaranteed for the telegraph; we did not guarantee for the telephone"; and in one particular place they would not have the telephone.

2784. They

*Chairman*—continued.

2784. They do not recognise that the telephone is a telegraph?—They did not then; they do now, because we have persuaded them to the contrary. It is working very well as a telephone now.

2785. Will you just give the number of telephones in use under the Post Office?—The present number of telephones in use in the Post Office is this: Exchange and call offices, 1,900; private wires, 3,000; public offices (post and telegraph) worked by telephone, 680; life-boat stations and coast-guard stations, 354; lighthouses, 39; lightships (two to each), 8; Government wires, 1,025; so that we have a total of 7,006 telephones at work in the post office system.

2786. We have heard a good deal about telephone and telegraph monopoly; would you give your reasons in support of your view that it should be maintained?—I, sir, advocate imperial monopoly in postal, telegraphic, and telephonic work, because it secures uniformity, undivided responsibility, popular supervision, and popular control. It was mentioned in evidence that Mr. Fawcett said: "The monopoly should be governmental, because it can be controlled and is directly amenable to public opinion"; and I think reason and experience point to "one area, one system"; it means not only the best efficiency but the greatest economy. The multiple systems, as I have already said, mean inconvenience, delay, and expense; the public suffer ultimately in swollen capital. The Americans all over their offices have printed this: "The mail is quick; the telegraph is quicker; the telephone is instantaneous, and you do not want to wait for an answer."

Mr. *Grant Lawson.*

2787. You were calling attention to the fact that if there were municipal telephones there would be increased rivalry and different systems; besides some of these systems might possibly not fit in with other rival systems of the country?—That would be the great danger, Sir. That is what I mean by the encouragement of private or individual idiosyncrasies; small men would be appointed, and in charge of these local exchanges, they would introduce their own fads, and we should find great difficulty in working harmoniously with a disconnected system.

2788. I suppose it would be possible that it would render it impossible for a subscriber on one exchange to communicate with a subscriber on another?—I doubt the practical impossibility; I question the commercial possibility. That is you cannot get two opposing concerns to work in harmony even under the pressure of the Government.

2789. You have told us, for instance, about the electric light system, with the little lamps showing when the conversation is over. If one municipality had that, and another had the female voice for showing when it was over, can you conceive a possible system of communication through those two systems?—It would be extremely difficult.

2790. Do you notice another objection to municipalisation, the difficulty (I do not think you drew attention to it as far as I remember) of the question of where to address your complaints?—That is a great difficulty also. There is also another great difficulty I ought to have mentioned, that is the innumerable number of lists at the different exchanges that would have to be kept.

Mr. *Grant Lawson*—continued.

2791. I notice you give in this diagram numbers, I suppose imaginary numbers, of the subscribers?—That is so.

2792. But you realise what the difficulty would be if there were three sets of numbers, one for the Post Office, one for the Municipal Telephone, and one for the National Telephone Company?—Yes, and those numbers would have to be kept by every post office in the country.

2793. Your own idea is, I gather, that it would be better that the whole system should be nationalised; you think that would be the best of everything?—Unquestionably.

2794. If the municipalities made it pay do not you think the Government would have some difficulty in getting it from the municipalities. Assuming for the moment that they did make it pay or that some of them made it pay?—After the reasons I have given I think it is rather difficult to assume that they could make it pay; and even if they did make it pay it would be extremely difficult for the Government to absorb it unless they were very complacent indeed.

2795. And if they did not make it pay you expect they would have trouble with the ratepayers?—Certainly.

Mr. *Tully.*

2796. You have described to us the improvements introduced in America for the automatic signal, the electric lamp; have any improvements like that been introduced in this country by the Telephone Company?—Not yet.

2797. You also told us that in America the companies there send round inspectors to instruct the people how to use the telephone intelligently?—In America they do.

2798. Has that been done by the National Telephone Company in this country?—I am not aware of that, sir; they can give you evidence upon that point.

2799. You also said that it would not be possible for a corporation to compete with the Telephone Company, because they would not have a trained staff the same as the trained staff that the Post Office possess?—That is so.

2800. The Post Office has a trained staff, and they started the telephone business themselves, and they allowed this company to beat them out?—But they have not; we hold our own.

2801. Have not the company beaten out the Post Office?—Only in a few isolated small cases, for instance, Plymouth; we went down there and established an exchange at the request of the Plymouth people, and after a little time the Telephone Company went down there; they used persuasive measures which induced our subscribers to go to the Telephone Company, and our exchange ceased at the end of five years.

Mr. *Tully*—continued.

2802. So that although it was possible for the company to beat out the trained staff of the Post Office, you think it would not be possible for the municipality to beat out the trained staff of the company?—But the Telephone Company have a trained staff, and a very well trained staff.

2803. But what was possible for the company you do not think would be possible for the municipality?—Except in course of years.

2804. You stated that this company with this large capital ("swollen capital," I think you called it) would be able to oust the corporations by reducing prices, and using this capital for the purpose of ousting the corporations?—I think if the Telephone Company have succeeded in ousting the Post Office, as you said just now, they certainly would succeed in doing the same thing with a municipal body.

2805. Yes, if the municipal body were as complacent as the Post Office appears to have been with this company?—But a municipal body is a very difficult body to move; they have got their committees and their councils, and they are subject, as a rule, to the supervision of the Local Government Board. They cannot spend money without the authority of the Local Government Board, which makes it very difficult for them to compete.

2806. Do not municipal bodies manage with great success large undertakings such as gas works, waterworks, and, in some cases, electric lighting and tramways?—But then those are businesses that are confined entirely to their own area, and which do not affect in the least degree what is done in another town.

2807. Do not corporations supply outside the corporation area, for instance, water and gas?—Yes; the Corporation of Manchester can supply its own water, and the Corporation of Leeds can supply its own water.

2808. And outside its municipal area?—Only when the municipal area is very small. It is only within their own district that they supply water and gas. Of course there are many places where they do supply outside their own area; but my answer to that is, that the telephone business is essentially national and imperial, and it is becoming international.

2809. But are not the Company in this agreement, in which they hand over the trunk lines to the Government confined to local areas?—They are confined to areas which are shown in those maps on the wall.

2810. What you call telephone areas?—Yes.

2811. They are not a national system, but they are confined to local areas; could not corporations also be confined to these areas if they got a license for a telephone area?—They are virtually areas within the meaning of the word "area"; of course they are much larger in many cases than the municipal areas, but still they are local areas.

2812. So that that objection that you make, that it is an imperial matter, would not apply as regards this company, which is confined, practically, to local areas?—That is so.

2813. In your seventh reason, I think you stated that the result of competition between a company and a municipality would be that the company, to preserve their present position, would reduce their charges, and would give metallic circuits?—That is so.

2814. Would not that be a benefit arising from competition in that particular area?—I do not follow that.

2815. Would not that be a benefit to the subscribers in that particular area, that the charges would be reduced, and that a metallic circuit would take the place of the existing system?—Yes, sir; but, as a rule, competition, while it produces a reduction in tariff for a time, does not, as a rule, produce a reduction of tariff in perpetuity.

2816. But where we have a monopoly at present, we have not that monopoly supplying the best system, or sending round inspectors to instruct the people or supplying automatic signalling, such as you have said exists in America?—Of course you will have evidence on this from the Telephone Company itself. My own impression is, that they are doing all they can to make their service as good as it can be made. I have had occasion to visit several of their exchanges, and I find they compare very favourably indeed with exchanges in the States.

2817. Supposing that the municipal body had the license for a telephone area, and that their system succeeded, as the municipality was not overweighted with a swollen capital, and had not to pay a dividend on swollen capital, would it not be better for the body which was going to take over those things that they should have the choice of taking the better system of the two?—That is a question of financial policy, I think, on which I cannot express an opinion.

2818. You have spoken against competition?—Very strongly.

2819. I ask you, would not that be one of the effects?—The whole tenor of my argument was from a post office point of view, as against municipalisation. I did not make any reference at all to the company, or to the bearing of the agreement to which you were referring just now.

2820. Just one other matter (it is a small point) with reference to what you mentioned about Wales; you said that in the rural districts the people object, where the local bodies guarantee a telegraph station, to getting a telephone service?—They objected to the use of the telephone instead of having a telegraph. It is simply an objection which is the result of ignorance. As soon as the advantages of the telephone were pointed out to them they withdrew their opposition.

2821. I have had a letter from a gentleman in Wexford complaining that there they have got a telephone service instead of a telegraph service, and they think that they have not been fairly treated?—That is the same complaint.

2822. Yes. Do you think they have no reason for that complaint?—None whatever, sir.

Mr. *Benn.*

2823. May I first of all ask you a few questions on your seven reasons against municipalisation. First of all you said that it was undesirable

Mr. *Benn*—continued.

undesirable that a municipality should own and conduct its own telephone, because a municipality was a fluctuating body?—I used that against competition, because it was given in evidence.

2824. I do not object to it at all. Parliament is a fluctuating body?—Not so fluctuating as a Town Council.

2825. Why not; one side goes in, the other goes out?—I think members of the Town Council are re-elected every third year; is it not so?

2826. Well, there is that difference, I admit?—Yes.

2827. But with the exception of that difference, it is pretty much the same, is it not?—I have not found it so.

2828. Then the fluctuation is a difference in degree?—A very great difference in degree.

2829. Then, admitting that Parliament fluctuates to some extent, do you think that that is anything against the control of the Post Office by Parliament?—The control of the Post Office is virtually by the public, that always exists.

2830. Does not that same answer apply to the affairs of the town? You may say that the affairs of the town are conducted by the citizens, who always exist?—To a certain extent that is certainly true; but, as a matter of fact (and on this point I have some experience of the operations of a Town Council), I find that this fluctuation is a very serious matter indeed in the proper conduct of a competitive business. I have the electric light business in my mind.

2831. Let us come to that: My point was that if Parliament, being a fluctuating body, could conduct an institution of which you are very properly proud, probably, in a smaller degree, a municipality might do something in the same way; but, to come to electric lighting, I will take a recent instance, with which you are probably familiar: The parish of St. Pancras, which is practically a municipality, has carried out, as you know, an electric lighting enterprise, and you have probably seen the first balance-sheet of that enterprise; now, may I take it that all the objections which you have urged with the force of your great experience, against the municipalisation of the telephone, would apply precisely to the electric lighting enterprise in such a district as St. Pancras?—It does to some extent, and to some extent it does not. Now, in the first place, as in my reply to the honourable Member on my left, I said, my great point is that, in dealing with the telephone matter, we are dealing with something that is Imperial, and may be international. In the electric lighting business we are dealing with something that is absolutely and wholly local. I do not raise any objection at all to the management of any of these great industries by large bodies. For instance, take such places as Manchester, Nottingham, Bristol; they have already experience with large industries, and they form small and strong committees; they maintain a kind of continuity of policy by re-electing the same chairman; but when you come to small corporations, they start with very large committees, they are constantly changing, and the result is that you find sometimes that they cannot agree upon the system to be used; sometimes they cannot agree upon the man whom they employ to conduct the service, and it is incessant trouble and squabble. In St. Pancras you have an instance of a very fairly successful municipal undertaking.

2832. Your answer is very important, because, if I understand it, you tell the Committee that the objections which you have urged against municipalisation are not intended to apply to large towns like London, Bristol, or Glasgow?—Not as regards those industries we are talking about, but as regards the telephone industry, of which we have been speaking, they equally apply to all towns; that is, dealing with the Imperial character of telephony.

2833. Then, on the Imperial point, I may say at once, we are all agreed that it would be most desirable that your Imperial idea should be carried out, but we have got to deal with 17 years of difficulty, until 1911; that is rather the point?—Yes.

2834. I want to ask you this: what is the difference between a municipality being permitted to undertake such an enterprise as electric lighting; we are now on the point of the fluctuating body rather?—Yes, I quite follow you.

2835. Such an enterprise as electric lighting and a telephonic system; what is the difference?—Well, I pointed out that a town council was at a great disadvantage, because they failed in acquiring that continuity of policy that is essential to maintain any industry in proper working order.

2836. The same applies to electric lighting as to the telephonic system?—It does.

2837. So that would you extend your objection to all those enterprises which are carried on (I think I may say) with such success in Glasgow?—I think there is a limit.

2838. May we take it that you are an enemy to municipalisation in any form?—Oh, no, sir.

2839. Will you tell us how far you would allow the municipality to go?—I am sorry you have led me rather to introduce even electric lighting into the matter, because I wished it to be confined almost to telephony, and my principal reason is the one you admitted just now, that is its imperial and international character. But I should be very sorry to imply that, as a rule, corporations, and especially large corporations, cannot conduct industries, for we know that they do.

2840. That leads me rather to your second point. You say: "We know that they do." You favoured the Committee with a list of very striking foreign examples of what can be done by municipalities. We have also had some very striking and encouraging examples in this country. In view of those examples what would be your opinion. May I just cite a case?—Yes.

2841. Take the effect which was produced on the telephone system of Dundee by the enterprise; not of the municipality, but of a number of citizens joining together, and starting a company in order to provide a more efficient service at a lower price; would you think that was an

Mr. *Benn*—continued.

enterprise which was outside the range and power of the municipality?—That was done by a few active, energetic——

2842. Citizens?—Inhabitants, who formed a company, scarcely a municipality.

2843. There is no reason why the municipality should not do the same?—There is no reason whatever why they should not do the same as that which was done at Dundee.

2844. Then, on your third point, you told the Committee that the result might be a loss to the municipality, and that that would set the poorer ratepayers against the enterprise, that the poorer ratepayers not sharing in the benefits of the system would be opposed to the payment of rates to support a system which could not exist on its merits?—That is what I said.

2845. Would not that be rectified by the representative system. Could not the poorer ratepayers, who are in a majority, easily put an end to any such waste of the ratepayers' money? —That is what I say they can do.

2846. Then, that reason rather disappears; it is a question for the ratepayers themselves; they have their remedy?—Just so.

2847. You pleaded an injustice to the poorer ratepayers?—No, sir; what I said was that as soon as ever a system commences to fail financially, the ratepayers will turn out their representatives who have started this badly paying business.

2848. That may be so, and the ratepayers would have to suffer?—Of course they would.

2849. Then in that respect you were acting rather as the guardian of the municipal interests? —I was.

2850. You have told us that it would be impossible to carry out a system of this kind without the advantage of highly-skilled officers who would be well paid and probably have the prospect of a pension; is it not a fact that in telephonic business much the same system obtains as that which is in vogue in electric lighting; that a standard of excellence is attained at headquarters, and that other men, not equally skilful, can avail themselves readily of certain appliances, and that it would be necessary to have in every municipality such an expert as yourself? —That is so to a very great extent, but it has this great disadvantage, that when men require promotion or advancement, they are promoted from one constituency to another, and they do not carry away with them the experience that they gain in one place to apply it to another where there may be a totally different system. Now, with telephony the same does not apply, because in a large system like that of the telephone company in America or the National Telephone Company here, promotion is obtained by advancement in the same business, not in a different business.

2851. But suppose a municipality decided to found a telephone system for itself, would it not for the foundation of the system engage the services of some well-known expert and after the system had been planned out and laid down, would not the subsequent operations be a matter which could be carried on by an electrician?—Certainly.

Mr. *Benn*—continued.

2852. Then that rather disposes of your theory that every municipality must have costly and highly-trained men?—No; you must have a resident well-trained man, and you must pay him well. Small corporations cannot well afford to pay high salaries.

2853. Then your sixth reason was, I think, that an existing agency can obviously supply subscribers at a lower rate than a competitor; they have the existing apparatus and probably some years start, I think you said, of the rest?—That is so, sir.

2854. But suppose they will not do it?—It is difficult to imagine that they would not; they could be forced to do it.

2855. But how? Suppose they will not; suppose they say: "We are in a position in this town, we have the monopoly, the Postmaster General will not grant anybody else a licence, the municipality or anybody else, neither a company nor a municipality," what is the remedy for that?—The Postmaster General does not decline to give a licence to anybody.

2156. Let us face the fact. The Postmaster General has declined to give a licence to the leading town of the kingdom, the town most competent to undertake such an enterprise for itself, that is Glasgow?—I do not think, sir, that is so. I do not think he has declined.

2857. The Postmaster General will tell you if you ask him. I will take it that as the Postmaster General is silent, it is so?—No.

2858. I can quote from the evidence, but it is known to the whole Committee that Glasgow has been refused a licence?—I deny that.

*Chairman.*

2859. Is it not the fact that if the National Telephone Company acted unreasonably to the citizens of Glasgow, the Postmaster General has perfect power to start an exchange of his own to meet the needs of Glasgow, which Mr. Benn suggests might not be met by the National Telephone Company?—Certainly, sir; that is the very reply I was just going to make to Mr. Benn; the Postmaster General holds that power in his hands.

Mr. *Benn.*

2860. I am quite aware of that. The Postmaster General, if he thinks well, can step in and enter into competition with the National Telephone Company, which is a very unlikely thing, seeing the partnership which is about to exist, or does exist, between the Post Office and the National Telephone Company. I want to bring you back to this point: Suppose the municipality, the citizens of Glasgow, think they can do better than either the Post Office or the National Telephone Company, are you aware that they have applied for that opportunity, and that that opportunity has been denied to them? —That I do not accept.

2861. I may say I am rather surprised you do not know, but still there is the fact. I want to bring you back to this point: Suppose the company in possession declines to charge the lower rate, which you think they ought to charge, being already in possession of the appliances, do you know of any other remedy than competition?

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tion?—I think the remedy the Postmaster General mentioned this very moment is the most powerful weapon he can hold to bring them to reason. If the ratepayers of Glasgow were to submit a petition to the Postmaster General to start an opposing exchange, and supported that by reasons which were sufficiently valid to the Postmaster General, he could start an exchange and bring them to reason.

2862. The enterprise of the citizens is to be filtered through the judgment of the Postmaster General?—There is no very strong evidence before this Committee at present that even the idea of the municipality in Glasgow is very generally supported by the Glasgow people.

2863. That, of course, is a question that I will not pursue, but I want to ask you this: you are aware, I think, that the policy of the Post Office a few years ago was free trade in telephones?—I have heard it said in this room, sir.

2864. You are aware that there is a distinct change of policy, which has not been either the outcome of Parliamentary action or countenanced by Parliament?—I suppose you refer to the agreement.

2865. I refer to the fact that municipalities have a difficulty in obtaining a license for themselves?—Yes.

2866. I want you to tell the Committee whether you know of any way by which a municipality can get a telephone service at a reasonable price other than by competition, except, of course, the intervention of the Postmaster General?—I do not know any other way.

2867. Now, on that point I should like, if I may, just to ask you (I am sorry to trouble you at such length, but you are an important witness) whether you are familiar with the attempt which was made in London by the New Telephone Company to provide a better service at a lower price?—No; I was not in my present position at that time, and I know little or nothing of what took place.

2868. You are probably aware that the price was less than that which is at present charged by the National Telephone Company?—I believe it was less, but I do not remember the facts; I did not pay the slightest heed to them at the time.

2869. Do you know anything about the electrical engineers who furnished the particulars to the New Telephone Company?—Not much; no.

2870. Would you regard the figures which were produced by that company as affecting any guide to this Committee?—I could not father them.

2871. I will just ask you this: I see that in the prospectus of that company (I ask you this because you gave us some very valuable information last week as to the cost per subscriber) it says, "Hitherto the number of subscribers to the telephone in Great Britain and Ireland has been small. For example, in the United States of America, with a population of 62½ millions, there are said to be 245,000 subscribers; at this rate there should be in the United Kingdom about 145,000 subscribers, instead of about 50,000. In Berlin, where the population is 1½ million, there are upwards of 17,000 subscribers, and at this rate the number in London should be



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increased from about 8,800 to over 50,000." Is that your idea of what we shall attain in London eventually?—I have never given it a moment's consideration.

2872. Do you think 8,800 is a reasonable number for London?—It is very near that now.

2873. Do you think it is a reasonable number?—Certainly.

2874. I do not think you understand me?—No, I do not.

2875. Do you think the citizens of London ought to pay for a telephone service which is limited, say, to 10,000 subscribers?—I see no reason why it should not exceed 20,000.

2876. I am very glad you think that. It says here, "It is estimated that 750,000*l.* should suffice for these purposes, and on this basis the net revenue of the company should be sufficient to show divisible profits equal, at a moderate calculation, to 12 per cent. per annum on the capital, while the additional facilities of the Telegraphs Act, 1892, may be expected to open up new sources of revenue, and thus increase the profits of the company." Considering the source of these figures, considering the fact that a number of the directors of the National Telephone Company are on the board of directors, would you consider that that is a safe version of the financial position?—I could not possibly express an opinion on a prospectus like that, which is in words that I have never seen, and do not know who drew it up.

2877. But you have put in certain figures telling us that the subscribers of London could not be provided for at less, I think, than 55*l.* a subscriber?—That is my estimate.

2878. I ask you how you regard these figures as a reply to the evidence which you gave?—If they do not agree with my figures I should say they must be very wrong.

2879. Then that remark, I should suppose, would apply to such eminent experts as appear on the board of directors here; they all must be very wrong?—Certainly.

2880. May I take it from you then that the New Telephone Company could not carry out the proposals of this prospectus?—If their figures do not agree with mine they could not.

2881. Then I am afraid I must ask you what has been done in some other countries; I will take you from the prospectus to a few particulars of what other municipalities enjoy. You gave us, I think, some particulars from Sweden?—I put in a schedule respecting Sweden that Mr. Lamb promised to give the Committee.

2882. But you gave us, I think, a very interesting letter at the close of your evidence?—I simply put it in; I am not prepared to support it.

2883. Oh, but it is part of your evidence. I want to know whether you repudiate it or support it?—I will not repudiate it or support it. I have simply put it in, and have not even studied it.

2884. Will you look at it with me. I am afraid the Committee are in much the same position as yourself. This letter comes from Mr. Storckenfeldt, the Director General of Telegraphs in Sweden. He says, "The private

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telephone company in Stockholm has obtained the right to work telephones within a district of 70 kilometres radius from Stockholm, but may not extend their operations out of this circle." Then I will take you down the letter a little; it is unnecessary to trouble the Committee with the whole of it. It says "the private company;" have you got that portion; it is about one-third down the letter?—Yes, I see it.

2885. "The private company has repealed all fees, which were previously paid, for conversations between the different telephone lines of the company; that is to say, all the subscribers of the company now converse with each other within the whole district without paying any other fee than the yearly one. Even for Swedish circumstances the fees, which the company take, are quite unreasonable for free conversation within so large a district; as I have before mentioned, they have arisen from the company's fear of competition with the State. The States' telephone fees are" (I have turned this into English money. I think you may take my figures) 4*l.* 8*s.* "in the larger towns (that is an annual subscription), and 2*l.* 14*s.*" in the smaller towns. The subscribers have the right to converse with each other within their own system, and also with the subscribers in the subsidiary systems in the immediate vicinity. For conversations with subscribers in other systems a separate fee is paid amounting to 2*d.* "up to 100 kilometres," 4*d.* "up to 250 kilometres," 6¾*d.* "up to 600 kilometres," 10*d.* "up to 900 kilometres," and 1*s.* 1½*d.* "for beyond the latter distance, all for three minutes. We are endeavouring to restrict the districts within which one may converse free." Do you notice that?—I do.

2886. That comes from a gentleman who is anxious to save the telegraph service of his country; do not you think so; he is Director General of the telegraphs?—And telephones.

2887. Yes, but he looks at it rather from the telegraph point of view?—I do not know why he should; the telephone system in Sweden is very extensive.

2888. Well, we will see: "The working of the telephone lies in the hands of the State over the whole country, except within the district named around Stockholm. In this district the State has, at present, about 3,300 subscribers, and in the other part of the country about 18,000 subscribers." I do not think I need trouble you with the rest of the letter, but my point in asking you to look at it is this: that competition in the city of Stockholm has largely benefited the telephone users in that district (particularly with regard to price), and is an advantage which might probably be obtained in like manner by certain cities in this country?—If they chose to take the loss consequent upon starting.

2889. Yes, but as to the loss. You know that Stockholm is a city of about 250,000 inhabitants?—That is so.

2890. The General Company in Stockholm have 8,334 subscribers; that is nearly as many as they are in London. I think you may take that from me?—That is given in evidence.

2891. The State exchange, 2,440; and the Bell Company, 800. So that in Stockholm, with a population of a quarter of a million, there are 11,000 subscribers. Now, had the same ratio obtained in London, London, with its population of 5,600,000, would possess 255,000 telephones?—That is so.

2892. Are you in a position to tell the Committee that this enterprise of Stockholm, either on the part of the General Company, the State Exchange, or the Bell Company, has resulted in a loss?—No, sir; I have no information but the letter before you.

2893. This is not a letter, sir. You gave us very ample information from some other places?—Yes, but not Stockholm.

2894. Both as regards the number of subscribers and, I think, the profits paid?—I do not think so. I think I have rather carefully confined my evidence to the technical part of the business, and not the financial.

2895. Well, I read the rates just now from the letter which appears in your evidence, and I think I may ask you whether it is not a fact that these rates cover free and unlimited communication with any State subscriber within Stockholm and 43 miles radius?—It says so in the letter.

2896. It says so in the letter?—Yes.

2897. Now, in view of these figures, may I ask you whether you adhere to your judgment that a municipality, taking up this matter, is not likely to secure some advantages for its citizens?—If the municipality is willing to incur the loss, there can be no doubt that they would, by giving cheap service, increase the number of subscribers.

2898. Can you give the Committee any examples from those towns which you have cited, the tariff of which is so very much lower than anything we have in this country, where the municipalities have suffered loss, or where the ratepayers have been called on to make up the balance?—I could not.

2899. Then your fear is quite in the future, it is not based upon any figures?—It is based on the seven or eight reasons I mentioned.

2900. We have figures before the Committee?—But you have only figures at present from Stockholm.

2901. You have favoured us with a number of others?—No, sir, I do not think so.

2902. I can give you others?—I have given no financial figures at all.

2903. You gave us, I think, the number of subcribers and the tariffs which obtain in the various towns, did you not?—I did, but nothing as regards the financial success or failure.

2904. But you have given a very important opinion to this effect, that if a municipality undertakes this matter and charges less prices, it must result in a loss to the ratepayers and lead to a sort of municipal rebellion?—Certainly.

2905. Can you give us any instance of such a case?—No; no municipality has started yet.

2906. Now, this question with regard to London is, I think, a very important one. In your opinion, is the overhead system, which at present exists, likely to continue, or is it desirable that it should be continued?—I think that the overhead system will continue in those parts of the metropolis, and of all great towns, where a few wires are required; but where you come to main

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main arteries, where the wires must grow to probably from 50 to a hundred, and so on, the opinion I expressed was, that it was better to go underground.

2907. Do not you think it would be a matter of necessity in the course of a few years that all the present overhead carrying existing in the densely populated parts of London must disappear underground?—Yes, I think so.

2908. As in New York?—Yes.

2909. If that be so, do not you think it would be a great advantage to the Postmaster General when he came to acquire the system in 1911 (as we hope that he will) if London set to work in order to organise, so far as London is concerned, a complete underground system which would take the place, I may say, of the objectionable; I should like to say the abominable overhead system which at present exists?—There can be no doubt about it.

2910. No doubt about the advantage?—No.

2911. And do not you recognise that the municipality doing that work itself in conjunction with the other local authorities would have an enormous advantage in providing under its streets the necessary conduit pipes and subways for the wires?—I tried to lay down very strongly indeed that I believed the local authorities could assist the development of the business very much by constructing these subways.

2912. And the most effective way to assist would be to undertake such work themselves, would it not?—Yes, but not telephone work.

2913. Suppose the municipality organised a uniform system of putting in their own wires, would it not be a great advantage when the Postmaster General came to acquire the telephones in 1911, that he should have such a system ready at hand to substitute for that of the National Telephone Company?—It would be very much better for the Postmaster General to have his own wires in the subways.

2914. That is really no answer to my question?—I will go so far as this: it would certainly be an advantage to the Postmaster General in 1911 to have transferred to him a good underground system.

2915. The advantage which the municipality would have in arranging such a system for itself would be very greatly increased, do not you think, owing to the fact that the municipality owns a very large number of public buildings, fire-brigade stations, and places of that kind, which could be used for connections and exchanges and other purposes?—There is an advantage in that, certainly. It depends upon their position.

2916. Precisely; but in London do not you think the possession of those facilites really means that half the problem of a municipal service is solved?—The problem of a municipal service is certainly more easily solved in London than in any other district.

2917. I am very much obliged to you for that answer. Now, only one or two more questions: Looking at the position in 1911, I want you to tell the Committee how you think the Post Office would be able to disentangle itself from this partnership with the National Telephone



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Company?—It ceases, if I understand the agreement aright, whatever the connection may be; you call it partnership, but whatever it may be; it ceases in 1911.

2918. Oh, yes; but the telephonic communication would not cease?—No.

2919. The Post Office would then be face to face with whatever system had been set up by the National Telephone Company?—Unless Parliament in the meantime forced both the Post Office and the National Telephone Company to make other arrangements.

2920. Yes; we are all looking towards that particular millenium, but that is not here yet. I want you to face the position as it exists at present, because there is no such proposal before Parliament; I wish there were. Would not the Post Office practically be in the hands of the National Telephone Company?—Certatnly not.

2921. What would the Post Office do; set up another system?—Well, it is almost impossible to predicate what will occur in 1911.

2922. But we have to face that?—Not yet.

2923. Yes, indeed we have; it is our duty to inquire the effect of this agreement and the effect upon the ratepayers of the country?—Of course, the diagram that I place in your hands shows you that there is a possibility that before 1911 the trunk service in this country will be a very extensive one indeed; and the experience in America tends to make one believe that the trunk service is going to exceed the local service. If that be the case in 1911 the Post Office telephone service will exceed in extent and importance the service of the Telephone Company.

2924. Yes, I quite appreciate that with regard to the trunk service. I believe it is a great benefit to the country that that should be in the hands of the Post Office, but I want to bring you back to the local needs of London; I want to know what the Post Office is going to do in 1911?—I am happy to say I shall not be there.

2925. But we have got you here, and your opinion is worth a great deal to us?—I do not like to express an opinion; all these questions you are directing to me are really questions upon policy with which I am not familiar and on which I cannot express any definite opinion.

2926. You gave us six reasons, and every reason involved some grave matter of policy; you started this question of policy, if you will forgive me for saying so?—It is very difficult to answer any question as to what will take place in 1911.

2927. I want to ask you this, because this is purely technical: In 1911 will not the position of the Post Office be practically this, that it must either pay the price which is asked for this plant (obsolete or otherwise) by the National Telephone Company, or set up a system of its own?—It must be either one or the other; at least not necessarily to pay the telephone company their price, but to set up a system of its own.

2928. I say either one or the other?—Either one or the other.



2929. Now,

Mr. *Benn*—continued.

2929. Now, would it not be of very great advantage, when 1911 comes, if an efficient municipal service were at the disposal of the Post Office in competition with the National Telephone Company; would it not considerably affect the price asked by the National Telephone Company?—It might.

2930. It might?—Yes.

2931. And may I ask you this: Considering the enormous development of the telephone, and particularly the interesting development of late years in America, which I had the pleasure of witnessing for myself, do not you think that the advantage of a municipality commencing at this period, now that the patents have expired, with such local conveniences as I have indicated, the advantage of a municipality in establishing a system, would be enormous?—Well, I have given my reasons against it, and I must stick to my own reasons

2932. I am not speaking about this question of policy, which we have agreed to avoid, but a purely technical question; for instance, if you were putting down a plan for London, you would sweep away, probably, or you would ignore, three parts of the system which at present obtains, or at present is used by the National Telephone Company?—You must not forget this, Sir, that the telephone company, at the present moment, are entirely renovating the whole of their system, and they can construct just as good a system, perhaps a better one, than the County Council, for the simple reason that they start with experience that you have not got.

2933. Still, experience can be had for money; I will not press that question further, excepting to ask you this: Take the present position of the National Telephone Company in the City with what you call their multiple boards, you have told the Committee that an increase of subscribers, on that system, means a great increase of expense; that as the subscribers grow the expense increases?—Yes, that is so.

2934. Now, suppose the municipality of London said, Well, we will not have this multiple board system, we will send over an expert to Chicago; we will, as it were, put London on the divided board system; we will avoid these other difficulties, and thus we can provide 25,000 people in London with this great convenience at a much lower price; that would be a reasonable proposition, would it not?—But the telephone company could do the same.

2935. But they have not done the same; they have completed their exchange; they are at present building an Exchange in Gerrard-street?—Yes. I do not know whether you went to the Avenue Exchange, the Lime-street Exchange; I think you did.

2936. I went to both; I went to the Lime-street and to the Gerrard-street?—You saw at Lime-street a multiple board of the latest design supplied by the Western Electric Company, the great manufacturers in the States. At the time that was supplied that was a multiple switch-board up to date; but telephone experience is growing every day.

Mr. *Benn*—continued.

2937. Yes, just so?—At the next exchange that they are fitting up, which is Gerrard-street, you find they have taken advantage of experience, and they are there putting a Table exchange where they sweep away half the number of jacks. Next year they may open a new exchange in some other part of London, and it is open for them to place there the divided board system.

2938. You told the Committee (and it is a very important point, because the Postmaster General has insisted upon it) that the multiplication of subscribers increases the expense, and you explained to the Committee that the reason for that was the enormous multiplication of these jacks as the subscribers increased?—No.

2939. I thought so?—I mentioned that as a cause of increase in prime cost, not in the expenditure.

2940. Yes, one element in cost?—One element in cost in the capital expenditure, but it does not affect the increased cost of working, for that arises from the increased number of calls due to the increased number of subscribers, and the fewer number of subscribers' lines that the operators can attend to; but that has nothing to do with the multiple board.

2941. The multiplication of jacks involves the extra service?—No, it involves extra prime cost; it affects the capital cost.

2942. The greater the number of jacks the operator has to attend to the greater the number of attachments?—No; whatever system of board is used the number of jacks that the operator has to attend to depends upon the number of subscribers and the work done.

2943. Just so?—Now one operator can attend to 50 subscribers, but if your exchange increases fron 5,000 to 10,000, and the number of calls per day increases from 8 to 15, then each operator instead of being able to attend to 50 will only be able to attend to 35 or 40. It is there where the increased working expenditure comes from.

2944. Now is it not a fact that the present system in Chicago has reduced what I may describe as the jack difficulty to one-fifth?—It has.

2945. Does not that very largely dispose of your contention that this multiplication of subscribers means an enormous multiplication of cost?—No; only in the first capital cost.

2946. Just so; we are dealing for the moment with the capital cost?—What I said was this: that with a multiple board the capital cost increased as the square of the numbers of subscribers.

2947. Precisely?—That is the effect of the board itself. Where you come to the Table board half that is swept away; where you come to the divided board you come to one-fifth; it is a mere flea-bite practically in the total expenditure involved in establishing an exchange system. The greater part of the money is expended in constructing the outside lines.

2948. This is my last question. You gave some information with regard to the continental system. Can you tell us whether it is a fact that in Rome where there is competition the charges

Mr. *Benn*—continued.

charges are less than at Milan, Turin, Venice, and Genoa, where there is no competition?—I have no information on that point.

Mr. *John Ellis.*

2949. Have you a copy of your evidence before you?—Yes.

2950. Will you kindly refer to Question 2614. I want to ask you a few questions about this trunk-wire business. Can you give us the date up to which that map to which you refer is made up?—It was up to last week; it is not up to yesterday.

2951. Up to the end of April, I may take it?—It wants a yellow line from Leeds direct to London.

2952. In that respect it is imperfect?—In that respect it is imperfect.

2953. In other respects we may take it as perfect up to the end of April, say?—Yes.

2954. What is the amount of the million sterling which was voted in 1892 by the House which has been absorbed up to the end of April, say, in the construction of these lines?—It was given in Mr. Lamb's evidence; I think it was 374,000*l.*

2955. Then there is 600,000*l.* still remaining to be spent?—That is so, I believe.

2956. Are you proceeding at the same rate now as you have been doing the last 12 months, not faster?—We are proceeding to complete the scheme as fast as we can.

2957. How long will that 600,000*l.* last, do you suppose?—It will complete the scheme.

2958. I am aware of that, but within what date will you have the scheme complete; that is how I should put it?—We did hope to open it on 1st July, but I do not think at present it will be open until, perhaps, September.

2959. By the autumn of this year, I understand, the million sterling will be gone?—If the Postmaster General says so, it is so. I have not handling of the money, I spend it.

2960. Then orders have been issued by the head of the Department to spend the money, so far as you are aware?—No; my authority does not much exceed the 374,000*l.*

2961. The work you have in hand will not take more than 400,000?—Somewhere about that, perhaps 450,000*l.*

2962. The apportionment and spending of the remainder lies with the head of the Department?—Yes.

2963. Passing from that, then, can you give us any instance of the municipalisation of the telephone?—Not one.

2964. Nowhere?—Not one.

2965. Then there is no experience?—I cannot recall to mind a single instance.

2966. Then there is no experience either as to profit or loss?—No.

Mr. *Solicitor General.*

2967. You have mentioned the case of Plymouth?—Yes, sir.

2968. Will you just tell me what has happened there with regard to competing companies?—The Post Office established a small exchange at Plymouth; something like 30 or 40 subscribers. It was put there at the request of the Plymouth



Mr. *Solicitor General*—continued.

people themselves. They entered into an agreement with the Post Office for five years; the exchange was opened; it worked very well indeed; but the telephone company was jealous of our starting in such a district, and, aided and abetted by one or two very active men in Plymouth, the telephone company went down there and started an opposition exchange. They went to all our subscribers and gave them telephones for nothing, and told them they might have them for nothing until their agreement with the Post Office expired. When the agreement with the Post Office expired they all gave up their telephones to us, and they continued to work on the telephone companys exchange.

2969. That was the mode in which the competition was conducted?—That was the mode; and, of course, the Post Office is forbidden by the Treasury to compete, or to tout, or to do any of those processes that active competitors know how to indulge in.

2970. In fact, you found yourselves with your hands tied in that matter of competition; is that so?—That is so.

2971. With rivals who were not subject to any such restriction; is that so?—That is so.

2972. And who resorted to means that were forbidden to you?—That is so.

Lord *Stanley.*

2973. In your opinion, is the National Telephone Company doing its best in London to renovate its system as quickly as it can?—I believe so.

2974. In your opinion, are they employing the best materials, and doing the work in a way of which you approve?—Entirely.

2975. Then if, in the year 1911, the Post Office took over the system, you would be perfectly satisfied it would have a first-rate system with first-class materials and telephones, as far as you can see up to date?—That is if they continue to do what they are doing now.

2976. That is to say, if they continue to do what they are doing now?—Yes.

2977. Are you of opinion that the agreement now existing has in any way tended to act disadvantageously to the users of telephones in the metropolis?—I think quite the contrary.

Mr. *Tully.*

2978. Can you tell me what is the price at Plymouth now, as compared with what it was before the competition?—I think it is 10*l.* a year.

Lord *Stanley.*

2979. Mr. Benn, I think, mentioned something about fire offices and municipal buidings being used as exchanges; would not that be possible to be done at the present moment with advantage?—With the consent of the County Council, I should have thought so.

2980. Has the County Council been asked for that consent?—That is a question for the National Telephone Company.

2981. Have the County Council put forward any actual scheme for telephone work in London?—Only before the Committee.



2982. Do

Mr. *Snape.*

2982. Do you know the Liverpool exchange?—Yes.

2983. Is that on the same principle as the London one?—I think it is rather of an earlier date.

2984. An earlier date?—Yes; I think it is about four years old, if I remember rightly.

2985. Have they not adopted the latest improvements in Liverpool?—I could not answer that question. It is certainly two years since I visited the place. But you will have the telephone company here to give evidence

2986. The reason I ask is this: I had not an opportunity of seeing the London one, but I have seen the Liverpool one; perhaps this may help to the point to which I wish to get; they have provided in Liverpool for over 6,000 subscribers?—Yes. The board of the Liverpool Exchange is, I believe, a multiple board, and it is four years old.

2987. But is it not a larger board than any of the London boards?—I could not answer that question.

2988. I think I can tell you this, and perhaps this will help me to get what I want; if they have provided for over 6,000 subscribers, as they have done, and spent 3,500*l.* (I think), is there a board in London so large as that?—The board at Lime-street is constructed either for 5,000 or for 6,000.

2989. Then they are about the same in London and in Liverpool; the increase in the cost of working these boards, you tell us, is in geometrical progression to the number of subscribers?—Of a multiple board.

2990. Of a multiple board?—Yes.

2991. They add, I think, a board for every 200 subscribers?—A multiple board is divided into sections, and each section provides for 200 subscribers, so that if you take your multiple board, supposing it is 10,000, and you divide it by 200, you have the number of sections: 50.

2992. And an income of 10*l.* per user per annum from each of these subscribers (supposing the board were fully equipped) would give an additional revenue of 20,000*l.* to the company who worked that board?—Yes.

2993. Can you tell us what would be the extra cost of putting down this board to accommodate 200 extra subscribers?—I could not give it you off-hand.

2994. Are you aware that it requires three or four operators to work an additional 200 subscribers?—It would require four operators.

2995. And would the cost of connecting up by the wires be very considerable with the other system for these 200 additional subscribers?—As I gave it in my evidence in chief, that would be *pro ratâ* with the number of subscribers.

2996. In what way would the cost be involved; would it be by wires?—In wires, in fitting up apparatus in subscribers' premises, in wires along the streets or over the houses, as the case may be.

2997. The capital cost of that would not be considerable, would it?—It is the larger portion.

2998. The actual working cost would only be

Mr. *Snape*—continued.

the wages of those four operators, who are girls, I suppose, chiefly?—Yes, but then there are additional operators required for working the junction lines that might be involved, and there is clerical labour as well in the exchange, so that the additional four operators would simply be the four operators required to attend to the section during the busy hours. You have to provide for the early duty and the late duty; you have to provide for sickness and for holidays. The number of days of absence through sickness is a very considerable item. So that if you take all these points it is much more than the mere four additional operators that 200 subscribers would involve.

2999. But of the additional 2,000*l.*, which I think you estimated as the income at 10*l.* per user, is not a large proportion additional revenue, which the company would receive?—Yes.

3000. Can you give us what the proportion would be?—I cannot give you the exact figures, but my impression is that the whole thing runs *pro ratâ.* If the ratio between revenue and working expenses is so much for 10,000 subscribers, it will be precisely the same *pro ratâ* for 200 subscribers.

3001. Would it be possible to put it into figures for us at a future meeting of the Committee?—I think you will be able to get the exact figures from the National Telephone Company when they come.

3002. When they come before us?—Yes.

3003. Is there any engineering difficulty in effecting intercommunication between two competing systems?—No engineering difficulty whatever.

3004. Then, the witness from Scotland, who told us that there was, though he professed to speak with great knowledge, was speaking of something he did not know?—I do not think he quite understood the question. He had in his mind not engineering difficulties, but some other difficulties.

3005. I was really asking him about other difficulties, and he interposed with the remark that there were engineering difficulties?—No, there are none.

3006. However, would there be any difficulties so far as you know, between competing companies agreeing to reciprocal action so as to effect intercommunication between their subscribers?—I cannot conceive competing companies entering into any such arrangement.

3007. Just before passing from the exchange, I ought to have asked you another question when speaking about that. You told us, in answer to Mr. Benn, that there were great improvements being made as the result of the experience of those exchanges?—Yes.

3008. Will not a possible effect of those improvements be to lessen this increased cost which we have been told increases at such a terrible rate?—The tendency is rather to cheapen.

3009. I suppose it is not beyond the bounds of possibility that there ought to be even an automatic arrangement by which communications could be effected without operations?—I mentioned that this morning.

3010. And in that case it would be a very considerable

Mr. *Snape*—continued.

considerable cheapening?—If automatic contrivances were practicable and possible it certainly would tend very much to reduce the cost of working.

3011. And you think it is not without the bounds of possibility that such automatic plans are possible; you think science may compass it?—It has been tried, and I have seen it in operation.

3012. Then with experience it may be effectively tried?—No doubt.

3013. Now, supposing a company was established without the watered stock, which we are told the National Telephone Company has, would not the supply be very greatly cheapened in cost to the users?—If you stated entirely a fresh system, you mean?

3014. Yes. In a reply to Lord Stanley, you said just now there would be no advantage to London from establishing a municipal system; you must make that exception to your answer that at least there would be the advantage of cheapening the supply. They would start with an unwatered stock in London?—They would start certainly with that advantage on their side; they would not have to pay interest on such a large capital.

3015. Then you qualify that answer which you made to Lord Stanley when you said there was no advantage?—I did not take Lord Stanley's question to imply that at all.

3016. Then you admit there would be that great advantage. I do not wish to press it. What I want to get at is this: would there be an advantage to the user if the London County Council started a company with unwatered stock?—I think that stands to reason, sir.

3017. You have said that the overhead wires would be defective, if from no other cause, even with a metallic circuit because of the large addition to the number of such wires, impossible is perhaps the better word?—They would be impossible if their numbers were too great.

3018. And underground wires would ultimately have to be adopted in large centres of population?—Yes.

3019. It is only in such centres that municipalities, I assume, if they adopted competing systems, would establish them?—That would be so.

3020. Do you anticipate that there will be such a large increase in the use of the telephone, that before 1911 (before the expiration of the agreement) this alteration may have to be made of the abolition of overhead wires and the substitution of underground?—I think that that alteration has commenced already. In Manchester we have an instance where they are all going underground.

3021. I have not had the advantage of seeing your evidence of Friday, and was not present; but in a glance I have made at a portion of it I see you speak of very great difficulties encountered in some parts of London through the multiplicity of wires underground?—Yes, underground. I mentioned the fact that through Cheapside there was such a large accumulation of pipes that we could not lay any more down.

Mr. *Snape*—continued.

3022. Great difficulties were experienced, you said?—Yes.

3023. Will not those difficulties be largely increased when this result is brought about of the substitution of the underground for the overhead wires; that is to say, you will have a much larger number of wires underground, and your difficulties will be greatly increased?—I have tried to induce the Committee to see that the proper function of corporations and councils is to put down subways to provide for this large accession of wires.

3024. What I wanted to ask you was whether you did not think street subways should be provided, so that men could walk along them without taking up the streets to repair these telephone connections?—That is what they are doing in New York and Philadelphia. In New York and Philadelphia (in each place) there are 180 miles of subways constructed for this purpose.

*Chairman.*

3025. By the municipality?—By the municipality; at least, it is by a company in New York; I think it is the municipality in Philadelphia.

3026. By the company under the authority of the municipality in New York?—Yes.

Mr. *Snape.*

3027. Do you think that if these street subways are to be provided, municipalities will very readily allow private companies to have the right of constructing such subways and the control of them?—I think municipal bodies would retain the right in their own hands, and they ought to, to construct the subways.

3028. Would it not be an advantage, also, as they have the right of the subways, to put the cable wires there?—Of course it would.

3029. Then would not that be an argument in favour of municipalising the telephone?—It is perfectly distinct from the question of municipalising the telephone.

3030. You rather declined to answer a question Mr. Ben put as to the effect of the agreement which expires in 1911; but you have admitted that either the State would have to take over the wires and the plant of the existing company, or else would have to establish a different system; that, I think, you admitted?—Yes.

3031. If it established a different system, would not great delay occur in creating subways where they did not exist, in putting down the plant and making the communication?—It is a thing that must be done gradually, and it must be commenced in plenty of time.

3032. Long before 1911?—Long beforehand.

3033. Then the State, long before 1911, would either have to enter into negotiations with the National Telephone Company, to see whether it was possible to take over their plant, or start a system of their own?—Certainly.

3034. How long would it be before 1911 that you think such a negotiation would have to be entered upon?—Three or four years.

3035. There are 17 years to elapse; would not it be as well if such negotiation was entered upon at once, with a view of the State taking the

Mr. *Snape*—continued.

telephone over immediately?—The sooner the better, sir.

3036. If there were a cheapened service, either by the establishment of a competing company (a municipal company), or by the State taking it over, would not it give much greater facilities for the use of the telephone by the public?—If what?

3037. If a cheapened service would result from a municipal company, or the State, taking over the telephonic supply, would not that be advantage to the public?—Certainly.

3038. Has a loss resulted to the department by the use of the telephone being substituted for the use of the telegraph?—There has been a loss.

3039. If such a cheapened service were to be given, there would be a greater loss to the telegraph service, would not there?—There might be.

3040. As I gather, you are opposed to the municipalisation of telephones. Is one of the reasons that you fear there would be an additional loss to the telegraph service?—No; I simply argued against the municipalisation of the telephone system in restricted areas. I do not admit that there is much loss in a restricted area.

3041. You do not object to it on that ground; but assuming, in fact, it has been admitted, that a greater loss would result to the postal department by the increased substitution of telephony for telegraphy by a cheapened service; is not that also an additional and very strong argument why the State should supply a cheapened service, and prevent loss to itself by taking over the service?—It is so.

3042. I think this is the last question I shall have to put. In glancing over the small portion of your evidence that I was able to see, I notice there is a letter from Sweden, towards the end of the evidence (it is printed in the minutes), and in that letter it is stated that though trunk lines are being substituted, or rather, have been adopted by the State in that country, much unpleasantness has been occasioned, and more will be occasioned, by the fact that the State has not also the communications between the subscribers and those trunk lines: do you remember that statement in the letter?—Yes.

3043. Do you think that that will be the effect in this country?—I have not given it any consideration, sir.

3044. You have not given it any consideration?—No, I have not read this letter really; I merely put it in.

3045. Is it not an important matter to consider, because I understand the postal department is taking over or establishing trunk lines, and if the result of that establishing trunk lines is to create difficulties such as they have experienced in Sweden, and to lead them to anticipate more difficulties, it is important that the Department should see where it is going to, is it not?—In which part of that letter is that statement that you refer to?

3046. Question 2728, the last part of the letter. I will read the portion to which I refer: "Our experience is, therefore, that if full national telephone operations are to be arranged, the State must own the whole system, that is to say, the long lines as well as the local systems." The paragraph begins at page 154 with this: "For the company in Stockholm the right was allowed to converse on the long lines of the State for separate additional fees, a concession which has occasioned much unpleasantness, and will occasion still more. Our experience is, therefore, that if full national telephone operations are to be arranged, the State must own the whole system: that is to say, the long lines as well as the local systems." Are you of opinion that that would be the effect of the State taking over the trunk lines here?—I do not anticipate unpleasantness or difficulties. In my evidence this morning I have pointed out that if the State worked the whole all these points would disappear.

3047. That leads me to put one other question; that is, that you are of opinion, on that ground also, that even trunk lines are not everything that the public wants, and that the State ought to take the whole system over?—That is my view.

Mr. *Tully.*

3048. Lord Stanley asked you about things the company are doing in London: could you tell us whether in Glasgow the company are renovating their plant and laying down lines?—I have not been to Glasgow recently, but it was stated in evidence that they were, at any rate, commencing to put up a twin-wire system there.

3049. Supposing they have not done so, is there anything in this agreement that can compel them to do so?—There is nothing in the agreement to compel them to do anything.

Mr. *Moulton.*

3050. You believe that the right solution of the matter is for the State to take over the telephone service, and thus get the whole of the telegraphy of the country into its hands?—The purport of my evidence this morning has been to support that.

3051. Now just put that out of your mind, and suppose, for the purposes of the question I am asking you, that that is impossible: you have seen the agreement between the Telephone Companies and the Post Office?—I have seen it.

3052. We know that there is no restriction as to rates, and no penalty if the service is not efficient?—There was nothing of the kind in their license.

3053. I quite understand. Therefore, the only way in which the public can be protected with regard to this is under the clause which reserves to the Post Office the right of giving competing licenses?—Or competing itself.

3054. Or competing itself?—That is so.

3055. Now, I have unfortunately not heard your evidence, but you can tell me whether you think that competition is a practicable thing in telephony?—My evidence this morning has been to show that it is an impracticable thing.

3056. Therefore, the position of the public under the present agreements you view to be one without any defence?—No, I do not go so far as that.

3057. Well,

Mr. *Moulton*—continued.

3057. Well, what defence is there, supposing the companies, or the company, charges unreasonable rates or gives an inefficient service?—The power which every municipality has to petition the Postmaster General to open a competing exchange.

3058. That would be by competition?—By the competition of the Post Office.

3059. Then, I understand you to consider that competition by the Post Office is practicable?—I do.

3060. Therefore, the difficulty with regard to competition is not the impracticability of the thing itself, but that you think the municipalities are not the proper persons?—That is so.

3061. May I take it then that you see no impracticability in effective competition, provided the Post Office is the competing party?—That is so.

3062. I want for the moment to compare the position of the Post Office as a competing party with that of the municipality; in a competing service there is a liability to loss; at all events, at the commencement, is there not?—Yes.

3063. And there is also a need of considerable outlay before you can begin competition at all?—And delay and time.

3064. Do not you think that the Post Office would be rather difficult to move in favour of any particular town since it would involve outlay on that particular town and possible loss?—I think there would be difficulties if it were taken piece-meal as you suggest; but those difficulties would disappear if it were decided that the Post Office was to absorb the whole of the telephone interest of the country.

3065. I am not talking about taking it over; that I am putting out of the question for the moment, that is a question of policy which my questions do not refer to; I am talking about the remedy of the Post Office competing; you would not suggest that it should not begin to compete at all until it competed in every town, would you?—Well, if the reasons justified competition in one town, they would justify competition in every town.

3066. I do not follow you quite there; supposing that at Bradford the service was dear and inefficient, and that at Leeds it was better, do you mean that the Post Office ought not to interfere on behalf of Bradford until Leeds got equally bad?—But the systems, the tariffs, and the mode of working by the Telephone Company are the same all over the United Kingdom.

3067. Not the tariffs, are they?—Very nearly now.

3068. Is that so?—Oh, yes.

3069. The cost when the number of subscribers is small is very much less than when it is large, is it not?—*Pro rata*, no.

3070. Is it not?—Rather the reverse.

3071. The cost per subscriber is larger, the smaller the number of subscribers?—The cost per subscriber; the capital expenditure is larger for small exchanges than for large ones.

3072. I am talking about the tariff; I am talking about the cost of working coupled with the interest on capital; is that greater for few subscribers or for many subscribers?—The cost of working grows with the number of subscribers.

3073. That is what I thought; therefore in London the cost per subscriber is considerably more than it would be at Bradford?—Undoubtedly.

3074. And do you say the charge in Bradford is the same as in London?—I say nearly.

3075. Is it substantially the same?—No; the charge in London is greatly in excess of the charges in the provinces.

3076. That is what I thought; I do not doubt your statement?—Excuse me; I have been thinking you dealt with prime cost and not working expenses.

3077. I am taking the working expenses?—We are at loggerheads, or rather, we are not at one upon that.

3078. Supposing then that Bradford is charged too much or has an inefficient service, is it your idea that the Post Office should decline to interfere until other towns are equally bad?—The tariff of the Telephone Company for Manchester, Liverpool, Blackburn, Leeds, Bradford, Dundee, Edinburgh, Birmingham, Dublin, Belfast, and all great towns is on a five years' agreement; first connection, 10 guineas, second and additional connections, 8*l.* 10*s.*

3079. You are not quite giving me your attention to my question; it may be that Bradford is the same as Leeds, but I will take some town where it is not the same; is it your opinion that the Post Office should decline to interfere until the complaints are general in all towns?—Yes.

3080. If that be so and a town be badly treated, then there will be very little hope of getting the Post Office to come in and compete, will not there?—I said at first that this Telephone Company is a large single company worked on a uniform basis with a uniform tariff in the provinces and general uniformity of practice everywhere.

3081. You must take the question I am putting to you; supposing that one town is badly treated, you say the Post Office ought not to step in until all towns are badly treated?—But you commenced by pointing out that there was no power in this agreement to enforce a reduction of toll, or to improve working.

3082. Yes?—On those two points I say that their mode of working all over the country is the same, and that their tariff all over the country is virtually the same.

3083. There is nothing to ensure that it shall be so in the agreement, is there?—No.

3084. Now assume that there is a town in which the charge is too high, or that the service is inefficient; I understand you to say that the Post Office ought not to interfere until all towns are like that?—No, not generally interfere.

3085. Ought it to interfere in that town?—I will not admit the premises; I do not admit that in the tariff, or in the cost of working, there can be any difference between one town and another.

3086. You must just assume this (there is nothing in the agreement to provide for it); I

Mr. *Moulton*—continued.

am talking of a case in which a town is badly served; I want to know what your idea is of what the Post Office should do; should it interfere?—If you wish me to assume that in one particular town the service is badly done, and that the tariff is very high, then I should say the Postmaster General, if he received a petition from the townspeople to open an exchange there, would be justified in doing it.

3087. Your idea that the right way to meet that condition of things is that the Postmaster General should set up a competing exchange?—Yes.

3088. Now I want you to compare the question of the Post Office doing it with the Municipality doing it; the Post Office would have to face the possibility of loss, and the certainty of capital outlay for the benefit of that town alone?—Yes.

3089. You have a good deal to do with the public offices and you know their policy, I believe it would be exceedingly difficult to induce the Post Office to do that for one town, when it was not doing it for others?—It is only one town that we have to consider.

3090. Yes, that one town is badly treated?—If the unanimous wish of the town were that the Postmaster General should open an exchange there, the Postmaster General, I take it, would not have much difficulty in persuading the Treasury to give him authority to open an exchange there, even though there might be a loss.

3091. That is the kindest word with regard to the Treasury that I have heard from an official for a long time?—I am only giving you my opinion; that could be done.

*Chairman.*

3092. Especially if the local authority gave a guarantee in the interest of the inhabitants?—Especially if the town gave a guarantee.

Mr. *Moulton.*

3093. Now take the case of a Municipality; the Municipality would have a much more direct interest in the local excellence of the service?—I do not think that the Municipality would find the ratepayers so complacent as the Treasury.

3094. Would you kindly answer the question: Would not the Municipality have a more direct interest in the local excellence of the service?—No; because the telephone service being Imperial in its character, the telephone service in one town has a great influence and effect on the telephone service of any other town.

3095. Do you really say that the Municipality would not have a stronger local interest in the excellence of the service?—Scarcely.

3095*. Not a stronger local interest than the Post Office?—I think not.

3096. Do you seriously think that?—I seriously think that the Post Office has to regard the interest of all the towns its serves.

3097. I quite agree; but I am talking about a direct local interest; do you really think that it would not have a stronger local interest than the Post Office?—As I said this morning the telephone service is not a local business; it is a national business.

3098. I pass from that; the number of calls

Mr. *Moulton*—continued.

in a town is many times the number of calls from that town to another, is it not?—No, indeed.

3099. Not as a rule?—As a rule in England it is, because the trunk system has not been established; but when the trunk system is established, then I suspect we shall find our experience will be that of the States.

3100. Do you think the calls from town to town which are paid for, will be ever anything more than a fraction of the calls within towns which are paid for?—I am sufficiently sanguine to believe that they will exceed.

3101. At present I may take it that they do not exceed?—They do not.

3102. With regard to this inter-town telephony: you have given some reasons why the Municipality could not, in your opinion, do it satisfactorily; of these, the only technical reasons are the fact that you want skilled persons to supervise, and the complication arising from competition; is not that so, just look at your seven reasons?—Those are practically the principal technical reasons.

3103. The other reasons I will not ask you any questions about?—Telephony is done on the Continent in large towns as well as in small towns, is it not?—Yes.

3104. And in many cases there are one or two companies in the same town?—I think in Sweden only; Rome has been mentioned but I cannot speak of Rome.

3105. Do you suggest that the expenditure in getting sufficiently good technical men in those cases is large?—It is.

3106. The tariff is low?—Yes.

3107. And, as a rule, profits are made?—We do not know that.

3108. Well, so far as published balance-sheets go, they are?—We have only had information about Stockholm.

3109. Have you made any inquiries elsewhere?—No.

3110. Have you ever made any inquiries which showed that they were working at a loss?—No.

3111. If those towns can bear the expense of this technical staff, our English towns are, as a rule, not poorer are they?—No.

3112. Now next as to education: the complication would be the same, whether the Post Office took the competition on its shoulders or whether the Municipality took it on its shoulders?—The difference is, of course, that with the Post Office the local subscribers are in direct communication with the Post Office, and they have a more rapid command of the trunk system, and would be under a great advantage over a competing system.

3113. But they would be equally in connection with the Post Office whether they belonged to the municipal exchange or whether they belonged to the National Telephone Exchange?—Yes; but they would have one whole set of operations swept away which would enable their business to be done more expeditiously than the business of the local exchange.

3114. I do not quite see the difference between the complication, whether it is the Post Office which is the competing party or the Municipality; perhaps

Mr. *Moulton*—continued.

perhaps you will tell me what it is?—You will see from the diagram I have handed in, there are two post offices in connection with each other; centring on the Post Office we have two exchanges, one municipal, the other that of the National Company; also a local subscriber attached direct to the Post Office. Now the other subscribers which are indicated, M. 32 and N. 796, just taking two subscribers, in order to get to the Post Office, and the telephone they have to pass through their exchanges M. 1 and N. 1, whereas a post office subscriber is in direct communication with the Post Office.

3115. But Mr. Preece, that is assuming that the Post Office is its own exchange?—Yes, it is.

3116. But you will have to have as many exchanges if you have post office telephony as you have at the present moment?—But that only affects London probably, it is not so elsewhere.

3117. Do you mean to say then that you will have only one exchange in a town, and that a post office?—As a rule.

3118. Then this objection to the municipal system is equally an objection to the National Telephone system?—From that point of view, certainly.

3119. From that point of view; therefore this diagram only relates to the imperial solution by the Post Office taking up the telephony?—No, it answers your question: what advantage is there in a subscriber being attached to the Post Office as compared with a municipal exchange.

3120. Do you suggest that if the Post Office chose to compete in a town it would have only one exchange, and that an exchange at the Post Office?—You named Bradford; in Bradford there would be certainly only one exchange.

3121. How many exchanges has the National Telephone Company there?—Only one.

3122. Then that is a small instance; take one of the larger towns?—Take any one, Liverpool.

3123. Take Manchester, for instance?—Take Manchester.

3124. Is there only one exchange there?—There are two, I know; they are running one as a mutual. They may have small exchanges in the districts outside, but as a rule, there is only one exchange.

3125. The advantage that you refer to would only occur if the post office were the single exchange in the town?—It would occur under any circumstances; because it would sweep away under any circumstances one set of operations that is the set of operations over a junction wire between the municipal exchange or post office.

3126. But that would only be where the Post Office was the only exchange?—Yes.

3127. And it would only refer to trunk service?—Principally to trunk service.

3128. Entirely?—But it would also refer to a post office exchange if the Post Office had its own exchange with its thousands of subscribers.

3129. What I mean is this, the difference would only occur in trunk service?—No; we are assuming that the Post Office has an exchange of its own, and that it has a number of subscribers on that exchange.

Mr. *Moulton*—continued.

3130. We are comparing that with the case of a municipality having one of its own; the only difference would be in trunk wire?—You are quite right.

3131. You think that supposing the National Telephone Company does do the best that it can, putting aside the imperialising of the whole, one company is better than competition; but I am looking for a moment at the security that it will do it; you have told us that the working cost is lessened if the numbers are lessened; now, supposing you raise the price of the service, that has a tendency to lessen the number of subscribers, has it not?—Yes.

3132. Therefore raising the price operates favourably to the company in two ways; they get more per subscriber, and the cost per subscriber is lessened, is not that so?—That is so.

3133. So that there is a special temptation in this business to have high tariffs, is not there; I do not say that the National Telephone Company yields to it; I am not attacking the Company, I am sure, in any way, but there is a special temptation; one ought to be, as it were, a little on one's guard to see that there is protection where there is such temptation; as we know there is no clause which requires them to give an effective service at a reasonable price; you have told me the only check is competition; now in your opinion, is it not likely that the municipal competition would be easier to call in, in a case of failure to do their duty, than the Post Office competition?—From the purely local point of view perhaps; but then we cannot look at it from the purely local point of view, for you must regard the whole of the telephone business.

3134. You think the final remedy, the complete remedy, of imperializing, is the better?—And the only remedy.

3135. Perhaps we shall agree; you do not think that the local competition of the Post Office would be an effectual remedy?—I do not like it, sir.

*Chairman.*

3136. That is to say you do not like competition under any circumstances?—I do not like competition under any circumstances at all.

3137. Mr. Moulton asked you whether, with regard to the trunk-wire service, the Post Office would not be in a superior position to a municipality?—Certainly it would.

3138. It would with regard to the trunk-wire system?—It would with regard to the trunk-wire system.

3139. Would it not also be in a superior position as to competition, with regard to telegrams being sent by telephone, express messages and express letters being sent?—Yes, and all those facilities the Post Office gives.

3140. They would have that advantage over the municipality, if they were called in to compete?—Distinctly. As I have said, one whole set of operations involving time is swept away.

Mr. *Moulton.*

3141. Only in the case where it is the one exchange?—No, in the case that the Postmaster General

Mr. *Moulton*—continued.

General has named, the transmission of messages, and local service of all sorts.

3142. You would not have any advantage provided the exchange was not at a post office, would you?—The advantage is that when a subscriber is in direct communication with the Post Office he gets his wants attended to at once.

3143. That is if the exchange is at a post office?—If the exchange is at a post office.

3144. If the exchange is not at a post office then there is no such advantage?—That is the point.

*Chairman.*

3145. But if the Post Office entered into competition the exchange would always be at a post office?—Of course.

3146. Therefore the advantage would always arise?—The advantage would always arise.

3147. If the company had two, four, or five exchanges in the town, and the Post Office had two, four, or five exchanges in its competition with the company, in each case, whether it was one, two, four or five, there would be the saving of one distinct junction-wire brought into operation, in the case of the Post Office, as compared with the municipal telephone?—Certainly.

Mr. *Moulton.*

3148. Surely you do not mean that, Mr. Preece?—I do.

*Chairman.*

3149. With regard to the trunk-wire business, and all the special advantages which under the agreement are given the public, that would be so, would it not?—Yes.

3150. Then you were asked whether there were any penalties under the agreement if the company failed to give an effective service at a reasonable rate. Is the position of the company with regard to that matter precisely the same under the agreement as it was under the original licence, which practically still exists?—Precisely so.

3151. Extending over the next 17 years?—Precisely so; I have answered that point several times.

3152. You said, in answer to a question, that, in your opinion, there was no loss on the telegraph in restricted areas; do you apply that to smaller areas than London?—To the smaller areas than we have in London, for we have in London a very large local business of our own.

3153. Which has—you have reason to believe—been affected by the telephone business?—I believe so.

Mr. *Moulton.*

3154. Can you give us at all the proportion between trunk-wire messages and inter-mural messages, at the present moment in this country—one or two per cent. I suppose it would be?—I cannot give you any answer to that, sir; the business has never started really—we do not know, therefore, but we have the experience of the States; I took a great deal of trouble to find out, when in the States, the ratio between the trunk business and other business there; it is very large indeed.

*Chairman.*

3155. Have you any figures with regard to the proportion?—I mention it in my American report. In Chicago it was 50 per cent.

3156. 50 per cent. of the whole business?—50 per cent. of the whole business was trunk business in Chicago.

Mr. *Moulton.*

3157. What does "trunk business" mean?—I was going to say we must qualify the "trunk business" there, because they include in the trunk business the business between exchanges as well as long distances.

Mr. *Benn.*

3158. That includes business done in any part of Chicago?—Yes; it is a very large area.

Mr. *Moulton.*

3159. Anything, I believe, that goes through more than one exchange is called "trunk" with them?—Yes, it is; there is this fact also, they have had to triplicate and quadruple their trunk lines owing to the growth of the business; the business between New York and Chicago is enormous.

3160. Of course if the business which passes through more than one exchange is called "trunk," that is not the sense in which you have used the words "trunk line business" with regard to England?—No; I qualify that.

*Chairman.*

3161. I understand you have expectations that the trunk wire business in this country will very largely increase, when the trunk system is in operation?—There is not the slightest doubt about the matter at all.

3162. We have experience of that now between Manchester and Liverpool, and towns of that kind?—Yes, we have experience of that now.

3163. You have stated that, in your opinion, State control would be better than municipal control in this matter, with regard to the telephone; is that due to the fact that you believe there is greater security for continuity in the control of a great public department as compared with the various municipalities throughout the country?—That is so, as well as the influence of public opinion and the supervision of the public; I am one of those who believe that the efficiency of our Post Office is entirely due to the watchful eye of the public over our proceedings.

3164. And has there been in the Post Office with regard to the telephone and with regard to the telegraph a practically continuous policy?—That is my great argument, sir.

3165. Then you were asked to compare the electric light system with the telephone system; as a matter of fact, has the Board of Trade refused

*Chairman*—continued.

refused to grant two licenses over the same area with regard to electric lighting?—It has.

3166. Or rather, has that been the policy of the Board of Trade?—It is not general; they have granted in London two licenses over the same area, but I cannot recall to mind any case where they have done so in the provinces.

Mr. *Moulton.*

3167. They have always given the preference to the municipality, have not they?—Yes, because the Government has not entered into that business.

3168. But they always have as a matter of fact given the preference to the municipality?—I believe they have.

*Chairman.*

3169. And the Government, as you say, have not entered into competition at all in the matter of the electric light?—No.

3170. And no existing licensee has the right over the whole country as the National Telephone Company have, and as they have had for so many years?—Certainly not.

3171. Have you seen the two estimates put forward by the London County Council as to the expense of a London system?—Yes, sir.

3172. One by, I think, Mr. Binnie, the chief engineer to the London County Council, which I rather gather is an estimate of a system which is mainly, if not entirely, overhead; and in which he says, "It will be seen from the details that a general rental of 10*l.* should be quite sufficient to leave a balance on the right side." That, I believe, takes no account of the royalty to the Post Office, which would consequently have to be added if it was admitted as an item?—Yes.

3173. Have you examined that?—Yes, I have looked at it; I have not thoroughly criticised it, but I have examined it, and while I think the estimates themselves are very fair, I think they have rather under-estimated; with the natural desire, of course, of those who drew up the estimates to make them look as rosy as possible for the London County Council, they have omitted one or two things that I think are rather important. For instance, in Mr. Binnie's estimate there must be a very small allowance for junction wires. If the allowance for junction wires is a fair allowance, then the sum per subscriber is much too small. Mr. Binnie makes out the total expenditure per subscriber to be 36*l.*, that is overhead; I make it 45*l.* for London, and I believe I could substantiate my estimate pretty well. I think the difference arises from the fact that they have not allowed sufficient for junctions; I do not know what allowance they have made. My experience is, that you must allow a maximum number of junction wires between exchanges, and you must allow one-fifth the number of subscribers as a maximum. If, for instance, there are 500 subscribers centering on an exchange you must have a hundred junctions as a maximum. That is the case in Chicago.

3174. Between that exchange and the central exchange?—And the central exchange; I do not think there is enough allowance there; and, again, in the working expenses I am not quite sure that they have made a sufficient allowance for clerks; their working expenses are rather low.

*Chairman*—continued.

3175. But, speaking generally, the 10*l.* which I understand to be the annual rental estimated, is sufficient, and these two calculations, you think, are fair in the figures they have given, but rather under than above the amount you would put?—That is my view, sir.

3176. Of course the London County Council would have all the difficulties which the company have with regard to underground wayleaves; they have no control of the streets?—They have no control of the streets.

Mr. *Moulton.*

3177. Do you expect to put many wires under the streets, other than wires between exchanges?—Under the agreement do you mean?

3178. No; I mean, do you expect that in a telephone system a large portion of the wires to the exchanges would be underground?—Yes; all main arteries. I have mentioned, I believe, that when the number of wires exceed 50 they ought to go underground.

3179. They ought to be taken together to some spot, and then underground from that spot to the exchange?—That is my view.

3180. Having not only exchanges, but what you may call collecting points?—Collecting points.

3181. You would not, of course, take the individual house wires under the ground, but from collecting points?—From collecting points where they radiate away in eights, tens, and twelves; then they would all centre at one spot, where they would go in fifties and hundreds to the exchanges; when they go to fifties and hundreds it is much better to put them underground.

*Chairman.*

3182. That is to say, they would be taken underground to some point from which they would be taken up to the top of a house and distributed over the district?—Yes.

Mr. *Snape.*

3183. Is there any limit to the size of the exchanges?—Yes, sir.

3184. What is the limit?—They find that 5,000 in America exceeds the manageable limit, and the tendency in America is to centralise. I mentioned it in describing what was done in Chicago, where they are opening fresh exchanges in order to avoid the necessity of having these very large exchanges.

3185. What is the largest existing exchange of which you have any knowledge?—I think the largest is in Berlin, but I am not quite sure of the numbers; the largest in the States is that one at Chicago, and that is 5,000; the one in Paris is a large one, and that is nearly 6,000.

3186. As I named to you, there is one in Liverpool which provides, or is intended to provide, for over 6,000 persons?—Yes; but there are only 3,500 subscribers there at present.

Mr. R. E. Crompton, called in; and Examined.

*Chairman.*

3187. I believe you are the president of the Institute of Electrical Engineers?—I am, sir.

3188. And that you appear on their behalf to express certain views with regard to the telephone question?—Yes.

3189. Have you had any experience of the use of the telephone yourself?—As a user, not as an expert in telephone practice.

3190. Would you state the views of the institution with regard to the question which is before the Committee?—Yes; I have had conversation with a large number of our members, and there has been a pretty general agreement in their opinions that the views of the association ought to be put forward before this Committee.

3191. Will you state what those views are?—The general views are that the effect of the monopoly which has existed up to the present time has been to entirely deaden the interest that the electrical profession in England have taken in telephony; in fact, have deadened it to such an extent that we practically have no members who know anything about telephony; out of 2,032 members of the Electrical Engineers there are only 45 members who are put down as telephone men; of these 31 are in the employment of the National Telephone Company; 10 of them hold situations out of England; and there are only four men in England who are independent, who call themselves telephone engineers.

3192. I think, without exception, every witness who has come before the Committee has advocated the taking over of the whole telephone system by the State; would not that have a still more deadening influence upon the association which you represent?—I think it might; but I do not think things could be worse than they are at present from that point of view.

3193. You mean it is very bad now, and would be very bad then?—It would be very bad then. I am here, of course, to speak on behalf of limited competition, believing that that would encourage the spread of telephone knowledge over a much larger area than it is spread over at present.

3194. You would, therefore, oppose the State taking over the telephone system as a whole?—From that point of view I would.

3195. But from other points of view, would you?—No, I would not. From the point of view of the convenience to the telephone user, I think it would be a very great thing that the State should take it over; but I think, probably, that the balance of advantage would be in favour of the State taking it over after more was known of the subject; that is to say, after that period of competition which I suggest a great stimulus would be given to invention, and a great many improvements would be introduced which do not now exist; in fact, that the progress of the telephone would be somewhat correlative to that of the electric light, which is a free and open industry, and which has made the most gigantic strides in consequence.

*Chairman*—continued.

3196. Would it not compare more with the telegraph service, where there is no such competition?—I think you may say that the telegraph service approached very nearly a crystallised condition of perfection some years ago; there is very little further improvement possible in it; telephony is very far from that. I think we are only on the borders of what may be done in the way of transmitted speech. Probably the great invention that we are all looking forward to would be telephony without wires, and that is a thing which is greatly discouraged by the present condition of things. Very few men are in a position to make experiments on a matter of that kind which requires wires to enable you to do it, the use and control of wires.

3197. Have you had a meeting of the association to consider this matter?—We have had more than one meeting of the committee appointed by the council.

3198. Of a committee appointed by the council?—Yes.

3199. Has the council itself considered the question at a meeting?—Yes; when a committee was appointed, and there have been two meetings of that committee.

3200. I mean has the decision or recommendation of that committee been considered by the council?—No; there has not been a council meeting since; there will be a council meeting on Thursday.

3201. I do not suppose you suggest that the views you are putting forward are the views of the whole body of the institution?—They are the views of the committee, and they are known to me to be the views of a large number of members.

3202. Is Lord Kelvin an officer of the institution?—Yes, a past president.

3203. Does he share the views that you have expressed?—I have not communicated with him. I may say that the joint inventor of the telephone (Professor Hughes) shares my views very strongly, the inventor of the microphone, which is a transmitter really.

3204. In favour of competition?—In favour of competition from the point of view of encouraging invention; encouraging development.

3205. Not from the point of view of providing the best and most effective system for the public?—Well, the two things are not in opposition. I think that in order to get the best and most efficient system for the public you require further invention and further development, and that it will be best attained by limited competition. After telephony arrives at what I may call a crystallised condition, as is the case with telegraphy, the competition perhaps might cease, and the whole thing pass into the hands of the State.

3206. Of course you are aware that the telephone in England has gone through a period of, perhaps I ought not to call it limited competition, but unlimited competition, which has resulted, from causes which are fairly known to everyone, in the amalgamation of all the competitions in one

*Chairman*—continued.

one system?—The patent question alone entirely prevented competition; as long as the patent lasted there was really no competition.

3207. But we know there were competing systems in various towns, and in every case they have been absorbed into the National system?—That I cannot speak to from personal knowledge.

3208. And you do not speak from personal knowledge on the question of competition and the effect it has had upon the service supplied to the public?—I speak from personal knowledge of matters of exactly the same class. I know what the effect of it has been on the development of electric lighting; it has lowered prices and improved the quality of the article.

3209. But the users of one system of electric light do not want to be in communication with the users of another system of electric lighting; they are independent of one another, are not they?—I think you must divide this subject rather into two heads: communication without the trunk lines and communication through the trunk lines, and I think our great want is simplification of communication without the trunk lines. We shall afterwards use the trunk lines very largely, I have no doubt, between certain large centres, but I think that what England lacks so much, and in what she compares so unfavourably with other countries, is the absolute want of the telephone amongst the poorer classes in villages and towns. Sweden has been so much mentioned because it is probably the country that is most ahead in telephone matters. There you find a very much poorer class dealt with and patronising the telephone than is the case in this country.

3210. You think the simplification of communication would be brought about by competition in the same area?—I think so. I think the whole world would be educated to a cheap service. They would be accustomed to a cheap service and they would demand it everywhere.

3211. But cheapness and simplification of communication are hardly the same thing?—As regards the trunk lines that is the case, but I think in the small local exchanges, such as I have before my mind at the present moment, they can be put up very cheaply indeed, and still give a sufficiently good service for local requirements.

3212. How do you get over the difficulty, if you have in the same area two competing systems, of half the subscribers being on one and half on the other; how do you get over the difficulty of communication between the subscribers on the two different systems?—That I cannot speak to. Mr. Preece has already spoken to that. I do not see any real difficulty in it from an engineering point of view, but, as I have said, I am not an expert on telephone matters sufficient to bear cross-examination on that point, but I am certainly engineer enough to say that there ought to be no difficulty. Really, what I am speaking to is the state of telephony all over England. I may say that I am an educator of young men for the electric profession. I have a very large number of pupils in electric lighting and electric transmission of power. Telephony



*Chairman*—continued.

is a branch of electrical engineering which they all wish to learn, but in which there is absolutely no opening at present, consequently they do not learn it. I know, and see, that the electric light and electric power schemes have been very greatly furthered by these young men going down into the country and getting together local capital, and starting local affairs; and I believe exactly the same course would rule with telephone exchanges; the intelligent young men of the country side would get together small exchanges, and small exchanges would be fostered all over the country if they had a chance.

3213. There is the opening into the ranks of the National Telephone Company's staff?—Yes, but it is not an opening for an ambitious young man who wishes to rise to be his own master, at all events to begin with.

3214. What you would advocate would be young men starting telephone systems about the country wherever they could get sufficient capital to support them?—Yes; I think there would be a great increase of business from that cause, and great credit to telephony.

3215. You think it would tend to simplification in local areas, but not in trunk lines?—Not trunk lines; they would have nothing to do with trunk lines; it would be simply starting small exchanges.

Mr. *John Ellis.*

3216. I understand you think the telephone system, as it at present exists, is very imperfect?—I think it is imperfect in this country as compared with other countries that I know.

3217. I gather that you desire what you call limited competition in order that there may be great improvements?—Yes.

3218. That invention may be stimulated?—That invention may be stimulated, yes.

3219. Then may I ask you, do you come before us as a telephone expert at all?—No, decidedly not; I come before you simply as president of the institution, speaking on behalf of the members, to get greater facilities for working telephones in this country than there are at present.

3220. Then your evidence rests upon the analogy you desire to draw between the telephone and electrical power?—The rest of our electrical education.

Mr. *Tully.*

3221. You said that competition was more effective than the present state of things (monopoly) in encouraging invention?—Yes.

3222. You said also that young men would learn all about telephony and would start systems of their own all over the country if there were competition?—Yes.

3223. If these young men started those systems, how would they get powers to run the wires here and there through the country?—Well, the district or the parish councils can give them powers and get them facilities.

3224. It would make them subject to the local authorities?—The district councils, or the parish councils, as the case may be.



3225. You

Lord *Stanley.*

3225. You have said that you represent the Society of Electrical Engineers?—Yes.

3226. May I ask how many there are in that society?—2,032.

3227. Two thousand and thirty-two; and out of this number how many do you say are now interested in telephony?—There are 45 of the members whose names are put down as connected with telephony, 31 of these are in the employment of the National Telephone Company, 10 of them are abroad, and four of them are independent.

3228. And you look upon those as the only competent men to deal with telephony in England?—They are the only men who have taken up telephony as a training, so far as we know.

3229. You were asked the question whether you thought that it would be advantageous for the State to take over the telephone, and I gathered from you that you thought it would be to the advantage of members of your society who wish to serve in telephony, but at the same time you did not think it would be advantageous to those who were users?—I qualified my answer by saying that I thought probably the happiest course that could happen would be that during the next few years competition should develop telephony to a much greater extent than at present; and that taking over by the State should not take place until the science was more crystallised than it is at present; and I think during that time we should, with a more free use of the telephone, certainly have a very large number of young men trained who are not trained at present.

3230. And those young men, you think, would go about into different districts and create small exchanges?—Exactly as they have done with the electric light and power transmission.

3231. Take electric lighting, say, for instance, in London; there is no great competition between electric lighting companies in London, is there?—No, there is not in London; but I was speaking of districts all over England, where telephones exist to such a very small extent as at present; I say that the spread of electric lighting and power stations has been greatly due to the initiative of young men who wanted work.

3232. May I ask what chance you think a young man starting in a small district would have against a powerful telephone company?—It would not be against a telephone company at all; he would have no competitors, he would fill a want. Take the case of a village which has no telephone and wishes to have the people in the village connected; they might commence with 20 or 30 subscribers. That can be done very cheaply and with a very small capital. Leave can be obtained from the parish council (wayleaves), and the exchange started. The later development would be to connect that with a trunk line.

3233. Have you any reason to suppose that at the present moment the National Telephone Company would be indisposed to grant such an exchange where there was a sufficient number of subscribers to make it worth while?—My reason for supposing they would not do it would be that the 10*l.* prices would be too high.

Lord *Stanley*—continued.

3234. The 10*l.* prices that they charge?—The 10*l.* price they charge would be too high.

3235. You think then that a young man, starting an exchange on his own account, would be able to do it cheaper than the National Telephone Company would be able to do it?—I think he would be able to provide it at prices similar to those which are found to exist in foreign countries; I see no reason why English people should not do their work as cheaply as foreigners; we find that in everything else we can compete with them; why should not we compete with them in telephone work; it is monstrous to suppose that we cannot do our work as cheaply as the work can be done in Sweden; we can, certainly, with the electric light, and I do not see why we could not put up a telephone exchange as cheaply.

3236. You must remember that if you had a small exchange created by, so to speak, a local man, that exchange would only have the advantage of intercourse among its own members; it would have none of the advantage that the National Telephone Company would be able to give in the way of communication through the trunk wires with other subscribers in other towns?—I think if such local exchanges were formed they would, as it were, pass an examination, that is to say, an exchange could be approved of by the Post Office authorities as being fit to be admitted on to the trunk lines, and then they could get connection with the trunk lines on just the same terms as the National Telephone Company could.

3237. On the same terms, but on no better terms as regards the subscribers?—The terms which the National Telephone Company paid for the use of the trunk lines, the local exchanges would also pay for use of the trunk lines in the same way, and at the same rate.

3238. You think it would be decidedly an advantage to the users of the telephone to have a series of small local exchanges, even although not connected up with each other through the trunk lines?—Certainly, it would be a great advantage to the users of those districts.

3239. Take any place on that map on the wall. We will take a place I know best, Huyton. In that district of Huyton do you think it would be more advantageous that a local man should come to Huyton and establish a local exchange at Huyton than that we should be in the hands of the National Telephone Company with communication with all the other places, including Liverpool?—I believe there are a large class of people who are prepared to pay the smaller sum of 4*l.* a year for intercommunication among themselves, and who do not want to be connected with the whole of the rest of England, and I think the class of people would be sufficient to encourage a large number of small local exchanges.

3240. Can you give the Committee any idea of the number of subscribers you would require in any particular small district to enable anybody to erect an exchange at the 4*l.* you mention?—No, I cannot.

3241. But

Mr. *Snape.*

3241. But local exchanges did exist before any trunk line communication was made, was it not so?—Yes.

3242. I presume the people found it to their advantage to establish local exchanges, even when they had no trunk lines, for inter-communication in their own locality?—Yes; the local exchanges must always come before the trunk lines; they always have done.

3243. I will not proceed with that. You have told us that the progress of the development of telephones was arrested, and the interesting science connected with it deadened in consequence of the monopoly by the National Telephone Company?—Yes.

3244. Is it your opinion that if that monopoly was taken over by the State the interest would be deadened in like manner?—I do not think quite so much.

3245. In less degree?—Judging by the papers read before our institution, there have been far more papers on the telegraph than on telephones.

3246. Is not the telegraph a monopoly of the State?—Yes.

3247. And has not there been far greater progress made in telegraph science since the State took over the control of the telegraphs than was made previously?—Yes, but I think the case is very much as I have stated as regards what would be the best thing in the case of telephones, that is to say in the case of telegraphs there was a limited competition which went on during the early period, and during that early period a great many of the inventions were brought forward. To take one, for instance, Professor Hughes' Type-printing Telegraph: Professor Hughes has told me that that invention would never have been able to be taken up at all if there had been no competition.

3248. My question was whether there has not been far greater progress since the State took over the supply of telegraph facilities than before?—I cannot speak with certainty upon that point; you may be perfectly right.

3249. You are an electrical engineer?—Yes. I mean to say opinions are very divided upon that point; we differentiate ourselves very much nowadays, and I think the number of people who are trained in telegraph matters is small now, comparatively, out of the whole bulk of electrical engineers.

3250. Are not the electrical engineers in the employ of the Post Office Department amongst the foremost scientific men of the age?—Yes.

3251. Does that look as if the taking over of the control of the telegraphs had prevented the progress of and deadened the interest in telegraph science?—I think there are a great many members of our profession who think it has done so; I will not say a majority, but a great many people think it has. Probably the interest being deadened proceeds from two causes: one is that it is crystallised; it has got to a point at which there is not much further improvement possible. That may be one cause of the deadened interest. The other is that naturally the Post Office servants are not so outspoken, and do not say so much about what is going on; there are not so many discussions on matters of detail in that matter as in other electrical matters which are burning questions of the day.

Mr. *Snape*—continued.

3252. But you afford us no facts to prove that it is crystallised, no example; on the contrary, the facts seem to be against you, the facts showing that the progress has been more rapid since the State took over that department?—You said so.

3253. I am asking you the question?—I do not think there is any strong opinion of that kind; I do not think anyone will say that the progress has been more rapid since; it may have been.

3254. I ask you the question, because if the interest has not been deadened, and progress not arrested in telegraphy, what reason have you to suppose that such a result would follow if the State took over the control of the telephones?—I cannot say anything more than I have said; it is a mere matter of opinion.

3255. Supposing the choice had to be made between the supply being continued by the National Telephone Company or taken over by the State, which do you think would be the better course?—I think, on the whole, the better course would be that it should be taken over by the State.

*Chairman.*

3256. You are acquainted with the Delani multiplex telegraph instrument, are you not?—I know it by name.

3257. Are you aware that although there is competition in the United States, that recent invention has not been adopted, whereas it has been adopted in this country, where there is no competition, and where the whole system is under the control of the State?—I am under the impression that competition in the States is a very peculiar competition, quite sufficient to account for anything of that kind; it is practical monopoly.

3258. You do not consider it competition?—No, it is not a real competition.

3259. Your suggestions with regard to local areas do not seem to me to point to competition; you are suggesting rather that these young men should go down into districts where there is no telephone system at the present time?—I look on limited competition as a means of spreading telephony all over the country. I see that telephony is spreading very slowly at present, partly on account of high prices. I think that competition would lower the prices, and that it would lead to educating the public in the use of the telephone. It is perfectly true that the users of the telephone are not educated in England as in other countries. In other countries the telephone is a necessity; here it is considered a luxury; and I think it is rather humiliating to an Englishman (at all events, to an English electrical engineer) to find that other countries look upon us as in the dark ages as regards telephony.

3260. And you attribute that backward interest in England to the absence of competition?—The thing has been in two hands only, or practically in the hands of one company.

3261. In those countries that you compare with England, I think, as a rule, there is no competition?—I think there is competition, sir.

*Chairman*—continued.

3262. What cases do you refer to?—There has been a very fierce competition in Sweden; the result is that it is the most go-ahead country in telephonic matters.

3263. Is it fair to compare Sweden, with its small population and its small towns, with a place like England. If you take the United States, there is no competition; if you take France, no competition; if you take Belgium, no competition?—I do not see where the unfairness comes in. I do not see where the difficulties are decreased by the poorness of Sweden.

3264. I suppose you would admit that the rate of wages has something to say to that; is it not a fact that the rate of wages is very much lower in Sweden than in this country?—Wages are lower; but when it comes to the cost of producing electrical energy we have to compare the cost here with that of Sweden, and we are able to compete with them. Whether our wages are lower or not, we manage to make them go further than they do.

3265. I am not speaking of the cost of electrical energy, but of the salaries of engineers; and, with regard to every class of staff in Sweden, is it not a known fact that the wages there are very much lower than in this country, and that that forms a very substantial portion of the cost?—I only spoke of electrical energy and the cost of producing electrical energy. The wages of superintendents form a very large part of the cost. Sweden has a very large advantage in cost as compared with us here, and it does not appear to show in their accounts. Although they pay lower wages, they pay a larger number of men.

*Chairman*—continued.

3266. You have mentioned that the deadening of interest is due to the absence of competition. Can you explain why it is that there is no competition in the manufacture of telephone apparatus where there is no difficulty put in the way of competing manufacturers?—Well, the patent has only been out a comparatively short time. The greatest users of telephone apparatus are the National Telephone Company. I think they import, or at all events, manufacture, practically in one factory nearly all they require, and small manufacturers of telephone apparatus hardly exist in England.

3267. Still I suppose the National Telephone Company would be open to an offer if they could get one at a reduced price, would not they?—As a matter of fact they do not give their orders to manufacturers.

3268. Do they get any offers; is there any competition by manufacturers?—There are no manufacturers.

3269. That is to say, the interest in manufacturing the apparatus is deadened in the same way, although there is no difficulty put in the way of competition?—Yes, it is so, sir.

Professor Silvanus P. Thompson, D.Sc., f.r.s., called in; and Examined.

*Chairman.*

3270. I believe you have been a member of the Institution of Electrical Engineers for a period of 15 years?—About 15 years.

3271. And have acted on the Council since 1886?—Yes.

3272. I believe you have acted as adviser to various companies in telephonic matters?—Yes, since 1881, I have.

3273. Do you come generally to support the evidence given by Mr. Crompton?—Yes; I, in general, agree with the evidence offered by Mr. Crompton.

3274. If there are any further points you would like to make will you state them?—I think I should like to emphasise the view derived from conversation with other members of the Institution of Electrical Engineers. There is a general view amongst our body that there ought to be no monopoly in the telephone business unless it were a monopoly directly responsible to the public, through Parliament; that is to say, we regard any monopoly in the telephone business as to be deplored if it were not the actual taking over of the thing by the Government itself.

3275. On whose behalf do you put forward that view. Do you speak in the interest of the public as telephone users, or in the interest of the profession of which you are a member?—I was rather echoing the views I know my fellow members to entertain.

3276. But in whose interest; in the interest of telephone users, because you think competition would bring about a more effective service, or

*Chairman*—continued.

in the interest of the profession of which you are a member, which you think would be benefited?—In both, I think; certainly in the interest of the public; because a monopoly that is not in the interest of the public is clearly a thing the public ought to be relieved of.

3277. That is assuming that this is a monopoly which is not in the interest of the public?—A monopoly that is not responsible to the public cannot be in the interest of the public.

3278. That depends upon how it is exercised, does it not?—Yes, but when anything goes wrong, if it is not responsible to the public, the public cannot set it right.

3279. I understand you, generally, to mean that you think competition would bring about a more effective service for the public?—A limited competition I think would bring about a more effective service for the public; and if there is not to be the limited competition, if there is to be a monopoly, that monopoly should be one that is a responsible monopoly; that is to say, in the hands of the Government, and not held through the hands of any third party.

3280. Then, admitting that the company have a licence which lasts for 17 more years, you think there should be competition; that other licences should be granted?—Yes, certainly, unless the Government buys up that licence or get hold of it in some way, which would be better.

3281. You think that would be the best solution of all, do you?—Most certainly.

3282. That they should take it all over?—Yes,

*Chairman*—continued.

Yes, whether we are ready for that at the present moment, or whether we should allow it to be further developed in sparsely populated districts, is another question; but, eventually, I think, there can be no question that they should take it all over.

3283. Are there any other points upon which you wish to speak?—I would emphasise the view that Mr. Crompton put before the Committee as to the effect that the absence of competition has had upon the training of young men. I have had a good deal to do with the training of young men for electrical engineers; I suppose in the last 10 or 12 years I have had something like 4,000 young men coming to attend my classes at one time or another; of these very few have gone into the telephone service, and very few have come to me and to my evening classes who have been in the telephone service; it is a matter which has forced itself upon me from time to time, that the education of the young telephonic engineer is not being conducted in this country upon really scientific lines; that is to say, there does not appear to be much encouragement in that branch of the profession. Parents come to consult me about placing their sons, and ask me whether they would do well to article them to such-and-such a firm, or they ask me whether they should put them to college for a couple of years. We talk over the careers that are open before the young men. Very seldom does it occur that I am asked whether the telephone offers a career to a young man; I sometimes suggest it myself, but it is very seldom asked about; they ask me about patent agencies; they ask me about submarine telegraphs; they ask me about electric lighting and power; but the particular branch of the electrical profession relating to telephones I am hardly ever asked about.

3284. You do not suggest, of course, that the future policy of the Government or of Parliament with regard to the development of the telephone should be adapted in order to open careers to these young men?—Not expressly for the purpose; it would have that effect, I imagine.

3285. You do think the policy should be decided upon with that view, that is to say, to open careers for the young men of whom you speak?—It is a minor point, surely, in shaping the policy of the Government.

3286. But it is not the governing consideration?—Oh no.

3287. Is there any other point on which you wish to say anything. A memorandum has just been placed in my hand. I do not know whether you are aware that in Germany, where it is a monopoly, the number of subscribers on the telephone system is the largest of any country in the world?—Is that so?

3288. Except the United States. Great Britain (where I do not admit that it is a monopoly, but where it is in the hands of one company) is the next largest, namely, 69,000?—The largest actual number, but is that the largest in proportion to the population?

3289. The largest number of subscribers?—But surely Switzerland stands much above England in the proportion of subscribers to population.



*Chairman*—continued.

3290. That would be so, no doubt, but the actual numbers are the largest. In Switzerland, I think, is also a monopoly, it is under the State?—I believe it is.

3291. That would hardly apply as an argument in favour of competition. Is there any other point you would like to mention?—Nothing, except that I think one thing that has tended in the past to deaden the interest in invention, and to deaden also the interest in telephone as a career, has been the repressive measures exerted in times past, when the patents were still holding out, by the holders of those patents, against anybody else doing anything whatever in telephony in this country. That cannot but have had a very bad effect upon the progress and development of that branch of the industry.

3292. Of course, that does not apply to the present time, the patents having ceased?—That does not apply at the present time, but I think that is one reason.

3293. In the past?—Yes.

Mr. *Snape.*

3294. You say that parents never ask you about a career for their sons in connection with the telephone?—No.

3295. But they do about submarine telegraphs. Do they ask you about inland telegraphs?—Very seldom.

3296. That is a monopoly of the State which you think is a monopoly to be advocated, and one which is for the public good?—No, no; please understand me; if by reason of the requirements of the public service and the engineering conditions involved, and the necessity for long inter-communication from town to town, it comes about that a monopoly is, in the interests of the public, the best thing, then I say that monopoly ought to be a monopoly by the State, and by the State alone, and not by any third party not directly responsible to the public.

3297. Do you know that in 1911 the present monopoly will cease by effluxion of time?—Unless another agreement is made before the efflux of it.

3298. Then the State will probably take over the whole system, if not before?—I presume so; it is to be hoped so.

3299. Do you think there will be any economy by delaying the taking over of the telephonic system until 1911, and not taking it over at present?—I doubt it.

3300. Do you think that much of the apparatus and many of the means of communication of the present company, if continued until 1911, would have to be taken over by the State even then?—Some of it undoubtedly would: it would be of very much less value then.

3301. You think it would be almost, if not quite, as economical to take the system over now without waiting until 1911?—That depends entirely upon the price you are going to pay for it. If you are going to pay for inflated capital there is no question of economy.

3302. I asked you that question, and you said there was no question of economy in delaying the taking over?—You asked me about the

Mr. *Snape*—continued.

appliances; if you are going to take over the appliances for what they are worth, I should say take them over now, certainly.

Lord *Stanley.*

3303. Do you concur in the opinion of the last witness as to the desirability of small local exchanges?—I think they are most desirable in the interests of the public.

3304. You look at it in the interests of the men who want to be trained as telephone men and not in the interests of the public?—I look at it in the interests of both for that matter.

3305. Do you think that the young men who formed these local exchanges would be able to stand long in opposition to a big company like the National Telephone Company who might run an opposition to them?—It would carry out the policy of destroying any competitor by running him out.

3306. I did not ask you that. Take any town where, at the present moment, there is no local exchange. Assume that a young man went down there and opened an exchange, and that the National Telephone Company came down there, connected themselves with that town, and opened an exchange of their own; do you think the first exchange would have any chance with the big company?—I think not; if the young man was merely financing it on his own footing. If he was doing it as the agent of a local authority I think he would be in a very different position.

3307. That is rather different. You, then, would rather be in favour of each local authority taking it up and having a local exchange?—I think so; I would certainly allow it.

3308. You would not look upon it in the light of a private enterprise in each locality?—I would not prevent private enterprise; but I would encourage private enterprise as backed by the local bodies.

3309. Then you would not wish the local bodies to stand in the way of the National Telephone Company coming into their locality if they wished to do so and (if you liked to put it so) underselling any other exchange?—Underselling any other exchange would be an enormous advantage from the users' point of view, provided it was not an intermediate step to raising the price after having destroyed the existing supply.

3310. How would you prevent that?—By your agreement with the telephone company. If you make as a condition of the user of the trunk lines the condition that prices shall not be first cut down and then raised, you can do it. I do not know what the policy of the Post Office is on that point.

Mr. *Tully.*

3311. You think this monopoly cramps the intellect of the country in the matter of invention, and also in the matter of young men adopting telephony as a career?—It is putting it rather strongly to say that it cramps the intellect. It is perfectly notorious that when you have only one buyer there is not much inducement to invent anything to sell to him.

3312. With regard to these young men that we have heard about, who are to go about the villages starting telephone systems, if they had to compete with the National Telephone Company, would they not start clear; whereas the National Telephone Company has to pay interest on a watered stock of three and a quarter millions?—The presumption is that they could start much more cheaply.

3313. You would not approve of a monopoly, such as exists in the case of this company, a company that we are told here to-day goes down to Plymouth under the Postmaster General's licence, and gives subscribers telephones for nothing in order to wipe out the Postmaster General's own system?—I cannot understand how the Post Office could give a licence which would allow the licensee to interfere with their own business there. It seems to me perfectly monstrous that the Government should give something with one hand that would enable it to be competed against on the other.

Mr. *Moulton.*

3314. If I remember rightly, you were the adviser of the London and Globe Telephone Company?—Yes, I was.

3315. Which tried to set up a competing system during the period of the patents?—Yes.

3316. And who were beaten on the subject of the patents, and were obliged to give the system up?—We were beaten on the Bell patent; we won on the Edison patent.

3317. The receiver patent. Now, at that time, did you carefully go into the question as to whether competition was practicable?—Yes; the board of that company had a great mass of figures before them, and there were many discussions.

3318. And I believe the technical question was practically in your hands, was it not?—We thought so.

3319. I mean on your hands, personally?—Not entirely.

3320. To a great extent you were the actual technical adviser?—I was the technical adviser on all matters connected with the patent rights, and, to some extent, upon the construction, but not entirely.

3321. You did, at that time, convince yourself that competition was practicable?—Yes.

3322. And have you seen any reason to alter that opinion?—No; I think competition is still practicable.

3323. And I believe even at that date you proposed to do it at a lower rate for London?—Yes, we did; and we had some other ideas that never were properly developed. We had the idea (which I believe to be a valuable one) of developing in the City of London a number of local exchanges, in this sense: they were not to be actually limited to one locality, but they were to be exchanges limited to a certain class of users.

3324. To what you may call groups, as opposed to local exchanges?—For instance, we hoped to have had a Mincing-lane exchange.

3325. Call it a tea dealers' exchange, to describe it?—Yes, exactly so; a tea dealers' exchange. We intended to have had another for lawyers. These would, in actual point of area, have

Mr. *Moulton*—continued.

have overlapped, but we believed it would tend greatly to the simplification of system if we had them grouped in that way, and I believe it would be quite possible that even such overlapping exchanges, overlapping in area, might be worked by different owners, and yet the service be entirely satisfactory.

3326. In fact, you thought the right way to group might be to group according to probable frequency of communication; that is the people who wanted to talk most to one another would, as far as possible, be put on a single exchange?—Yes, that was the idea.

3327. That would correspond very nearly, would it not, to the case of a competing exchange, inasmuch as the areas would not be local, but would overlap?—Yes.

3328. And if there were, for instance, in Manchester, two companies serving the whole of Manchester, their various exchange areas would overlap in a similar manner?—Yes, they would.

3329. Do you think there would be any more difficulty in working two such companies than there would have been in working that system which you believe would have been a success?—No, I think not; and certainly no more difficulty than in working between Manchester and Liverpool.

3330. In fact, if I may put it so, except for the length of the wires, distance has no existence for the purpose of the exchange?—Except for the length and cost of the wires, and, of course, questions connected with maintenance, there is no difference

3331. Supposing these two sheets of paper to represent two exchange areas, there is no more difficulty in making a complete inter-communication side by side like that (*describing*) than when they overlap like that (*describing*)?—I see none.

3332. You believe, do you not, that telephony is of very great importance to society?—I do.

3333. And that it is not developed nearly as much yet as it might be, and as it probably will be?—Certainly not; it is not developed.

3334. I think you believe—perhaps I am quoting you—that it is a social agent of great importance, the use of which still has to grow very much?—Yes.

3335. Now, do you think it important that the service should be both reasonable and efficient?—Yes, of course.

3336. And do you think it is a satisfactory state of things that there should be no security that the company that has it in its hands should give an efficient and a reasonably cheap service. Do you think it is satisfactory that there should be no provision that that should be done?—You tell me that it is so, but I should not have believed it if you had not told me so.

3337. Supposing you were told that the only means of doing it was by threatening competition, still do you think that by means of judiciously used competition you could, if I might put it so, keep them up to the mark?—Oh yes; nothing is more certain that that.

3338. Now, just let us consider. Suppose they are minded (I hope they will not understand that I am suggesting they are minded) to behave badly, let us see what would be the most effective competition; it ought to have a strong local interest, ought it not?—Yes.

3339. It ought to have the command of money for the purpose of laying down a system?—Yes.

3340. And it ought to have a certain amount of patience in order to get over the initial stage?—Yes.

3341. Now, supposing that a town is being treated badly, in your opinion would not the municipality be a body which would have all those three qualities: strong local interest, command of money at reasonable rates, and patience. I ought to have added a fourth, that is, direct responsibility to the public. Do not you think the municipality would be a body whose competition might reasonably be expected to be the most efficient?—I think so; it would be the best.

3342. Therefore, if you are going to make competition your security, you think that, in case of failure of duty on the part of the National Telephone Company, the municipality would be the most formidable competitor?—Certainly.

Mr. *Solicitor General.*

3343. This case quoted by my honourable friend Mr. Moulton seems to be familiar to you and to him; what was this case?—The London and Globe Telegraph Company. It was a private company, started, I think, in 1881, which had the intention of setting up, and did set up, in the City of London, a rival exchange to that of the then United Telephone Company. They were owners of certain patents, notably of the Hunnings transmittor. They intended to supply telephones at a cheaper rate, and they also had the intention of arranging their exchanges in the way I have described.

3344. Now, what was the action about?—The action was an action for infringement.

3345. It did not turn upon any question of the practicability of working?—No; there was a double writ brought against them, which was tried before Mr. Justice Fry.

3346. But it turned on the patents?—Yes, it turned on the patents simply.

3347. Not on the working?—Not at all.

3348. You, as I understand, were the technical adviser as to certain patent rights?—Yes.

3349. As a matter of fact, I do not understand that this company had any practical experience at any time, or that it ever worked?—Yes, indeed it did.

3350. I beg your pardon; I should not have assumed that it did not?—They had an exchange in Coleman-street, which, I believe, was the beginning of the present National Telephone Company's exchange in Coleman-street.

3351. You used the phrase "intended to supply"?—Yes. They did not carry out their intention of making the exchanges, as I described.

3352. You used the words "intended to supply" about those local exchanges as to which I wish to ask you; they did, in fact, you say, start the business?—Yes, they did.

Mr. *Solicitor General*—continued.

3353. Did you advise them at all in connecnection with the business?—Yes, from time to time.

3354. What was your position?—Consulting electrical engineer.

3355. Then, you did not enter at all into any economic questions in connection with the company?—No, they were very seldom put before me.

3356. I think you expressed an opinion just now; you said that, in your opinion, competition was practicable?—Yes.

3357. The basis of that opinion, I think, was this idea with regard to areas, which should appeal more to classes of the community than to any particular locality?—Yes, that was an instance of the way in which areas might overlap geographically, while the interests served might be different, yet they might be put into intercommunication.

3358. I do not know that it is material that we should inquire; but you say, for instance, that there was to be one exchange for lawyers?—Yes, it was to be in the immediate neighbourhood of the Temple. The idea was that barristers and solicitors might be put into ready communication more readily than by going through a general exchange.

3359. That idea never was carried out, was it?—No, that never was carried out.

3360. So that you have no practical experience of the lawyers overlapping the tea dealers, as was suggested, as to whether it would work or not?—No.

3361. My honourable friend has asked you, I think I am right in saying that he put to you a series of considerations which occurred to his mind, as to the local interests, and the public money, and patience, and so on; had those considerations presented themselves to your mind before?—I do not know that they had at that time.

3362. At what time?—The time when the London and Globe Telephone Company was formed.

3363. I mean, had they suggested themselves to your mind before the honourable Member suggested them to you?—Certainly; for years I have had suggestions before me.

3364. Have you any experience of any municipality that does carry on a telephone business?—I do not think any municipality in this country does carry on a telephone business.

3365. Then you have no experience of one?—No.

3366. Do you, then, put the supply of telephonic communication upon the same basis as that upon which you put the supply of water and gas?—I see no reason why it should not be put on the same basis, always provided that the Post Office provides, first of all, the trunk lines or inter-communication.

3367. But you think every working man should have his telephone, and his water, and his gas?—Should have access to the telephone, should be able to put a penny in the slot, or something of that kind, and deliver his message.

3368. Do you really mean to suggest that, in your experience, the working classes use the telephone at all?—Not yet.

Mr. *Solicitor General*—continued.

3369. Then the opinion you have given to us is given upon the basis that you think they will use it?—I think they will.

3370. Will you tell me for what purposes?—To call a doctor, for example.

3371. Supposing the working man is in good health, how will he use it?—I can suggest some ways in which he may use it.

Lord *Stanley.*

3372. Will he pay 4*l.*?—No. He will not pay 10*l.*, or even 4*l*, in many cases; under a toll system he will pay.

Mr. *Solicitor General.*

3373. During the time when the working man is happily in good health, and his family also in good health, how will he use it?—It will depend on the industry in which he is engaged. I can imagine a market gardener using it.

3374. When I used the term "working man" I was not thinking of a market gardener?—He is a working man.

3375. I daresay he is, but when I was speaking of the working man I was thinking of an artizan?—The occasions are very few on which he would wish to use it.

*Chairman.*

3376. You say the London and Globe Company did not put into operation this system by which special interests were to be consulted and put into communication?—No, they never got so far.

3377. Has it been done in any country, so far as you are aware?—I really cannot tell you.

3378. So far as you know it has not been?—The nearest thing to it is, I think, in the United States, where there are what you may call domestic exchanges.

3379. What would they be?—Private houses throughout the whole district are nearly all connected with an exchange, and the getting in of provisions, the ordering of the whole of the things is done through the telephone.

3380. Would not that be due to the fact that the exchange happens to be located in a district which is filled with private houses, and not due to its being confined to any special interests?—It is an incident of that system.

3381. An incident of the locality?—It has not been laid down with a view to supplying one class only.

3382. So far as you know, that system has never been adopted anywhere?—No, I do not know that it has.

3383. I believe the London and Globe did not propose to provide a cheaper system than the United Telephone Company?—They certainly did at first.

3384. I see this is a report of that company; Mr. Eldred was the chairman, was he not?—Mr. Eldred was the manager, the chairman was Mr. Stewart Pixley.

3385. You believe it was intended to give the service at a cheaper rate than it was then being provided

*Chairman*—continued.

provided at?—Yes, we discussed that very often.

3386. What was the fate of the London and Globe Company?—It was eventually absorbed by the United Telephone Company.

3387. Then it is hardly a good argument for competition?—Possibly not.

Mr. *Moulton.*

3388. It could not get the requisite instruments, was not that it?—Yes, it could not get the requisite instruments; the instruments that it had were ordered to be given up.

*Chairman.*

3389. It met with the fate which has always followed competition up to now, that is, that it was absorbed by the National Telephone Company?—Yes, it was overweighted.

3390. Then I understand it has been suggested by Mr. Moulton that that would not follow the granting of municipal licenses, because they could hardly be swallowed up by the voracious National Telephone Company?—That is so.

3391. Are you aware that municipalities have not asked for telephone licenses except in the case of Glasgow, and I think one other large town. The London County Council has not asked itself for a license, and none of the municipalities have asked, except the two I refer to?—It is a very few years (I think, not more than 18 months), since the patent expired; they would be hardly likely to ask before.

3392. Still, you would not suggest that we should force licenses upon municipalities that do not require them?—"Force licenses" upon them, certainly not; but you should give them every facility for getting them when they apply.

Lord *Stanley.*

3393. You were talking about groups of lawyers, groups of tea merchants, and so on; would it have been possible in that system for the lawyer to speak to his tea merchant, and for the tea merchant to speak to his lawyer?—Certainly; there would have been inter-communication between one local exchange and another local exchange, just as at present, only the work in the local exchange would have been better arranged by grouping the clients, not according to where they happened to be, but according to what their business was.

Mr. *Snape.*

3394. If two competing companies existed in these overlapping areas, would that work well?—It depends on the conditions on which they hold the license; if they only held the license on condition that they should add access to the trunk lines, the thing would be perfectly simple. I see no more difficulty in allowing the exchange in Coleman-street to communicate with an exchange in the Temple (each belonging to a different system) through the Government trunk lines, than in allowing the exchange in Liverpool to communicate with the one in Manchester.

3395. That is to say, you would stipulate that they should allow it?—Surely.

3396. In a case where the company has already its license, how would you deal with that?—It is hardly for me to dictate the grounds upon which it should be done. I do not know the conditions under which the license was granted.

Lord *Stanley.*

3397. Each exchange would have the books of their customers; you would therefore have to have all the books with the numbers of your customers, and you would have to have those of every competing exchange?—I think it would be possible to simplify the system.

3398. How would you propose to simplify it?—In the same way as the "Post Office Directory" includes the names of a great many people who have no particular business in the Directory.

3399. You mean to say that supposing the Globe Company had been now in existence, and the National Telephone Company had a list of the subscribers of the Globe Company, they could make easy communication between the two. You would have had to have had the list of the National Telephone Company, and the National Telephone Company would have had to have had that of the Globe. Each of the companies would have to have not only the names of their own subscribers, but of the competing company's subscribers?—Yes, you would have had to have separate lists instead of one single one. There is not necessarily more printing involved.

Mr. *Moulton.*

3400. You now have to have the names of all the subscribers in your book, do you not?—Yes.

3401. You would have had to have the names of all the subscribers then?—Yes.

*Tuesday*, 14*th May* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Mr. Baird. | Mr. Grant Lawson. |
| Mr. Benn. | Mr. Arnold Morley. |
| Sir Charles Cameron. | Mr. Snape. |
| Mr. John Ellis. | Mr. Solicitor General |
| Sir James Fergusson. | Lord Stanley. |
| Sir John Gorst. | Mr. Tully. |

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Major-General C. E. WEBBER, C.B., R.E., is called in; and Examined.

Sir *Charles Cameron.*

3402. You are a Major General in the Royal Engineers?—I am, sir.

3403. And a C.B.?—Yes.

3404. You were at one time Divisional Engineer of the Postal Telegraphs?—I was.

3405. How long did you hold that office?—Nine years.

3406. You had charge of the telegraph service in the Egyptian War?—Yes.

3407. And since your retirement from active service you have been the managing director of the Bell and Edison United Telephone Company?—Not since my retirement, but during a period of six months' leave after the Zulu War.

3408. At the present moment you are connected with electrical undertakings?—Yes, I am consulting engineer both to telegraphs and to telephones.

3409. When did your connection with telephony commence?—In the years 1878 and 1879 I saw the early telephones that were brought to this country, and experimented with them on postal telegraph lines when I had the opportunity.

3410. I forget the date you gave of your connection with the Bell and Edison Company?—That was in the year 1880.

3411. You are well acquainted with the history of the telephone industry in the United Kingdom and on the Continent since that date?—I am.

3412. In 1884 I think you had some special intervention in connection with telephone matters?—In 1884 I read a paper before the Society of Arts, the object of which was to show how cheap telephony might be brought into existence in the United Kingdom, on which occasion you, sir, were in the chair.

3413. And afterwards (in 1885) you were appointed technical adviser to the New Telephone Company, were you not?—The New Telephone Company was one of those that came out with the view of competing with the National Telephone Company, and Professor Silvanus Thompson was one of the directors, and I was asked to become the technical adviser of that company, which I was until they went into liquidation or ceased to work under an injunction brought against them by the National Telephone Company.

Sir *Charles Cameron*—continued.

3414. The purport of your paper in 1884 was directed against the bad effects, if I remember rightly, of the monopoly, the injurious effects in this country on the development of telephonic science, and the service which would properly and adequately meet the requirements of the public?—Yes. One of the objects of the paper was to show that, in my opinion, the telephones of the country were in the hands of those who had not done justice to the marvellous invention which they had purchased, and to show that its extension, both as regards extent, efficiency, and cost, had not reached a point which in the five years it should have reached.

3415. I think we may take it at once that you are in favour of Government monopoly, if there is to be a monopoly?—Not altogether, sir, if you will allow me to limit it and state my reasons.

3416. Will you just explain your views upon that point?—I think that the Post Office are unquestionably right in regarding the telephone service of this country as the handmaid of the services for which they are responsible, and for which the public has paid so large an amount; but my view of the possible extension of the use of the telephone to this country makes me think it may get beyond the reach of even such a great department as that of the Post Office. I think, sir, that the Post Office are right in securing what may be called the arteries of the system, and I think, probably they are right in believing that they can manage better than anyone else what may be called that part of the system which is essentially used for commercial purposes; but what I should like to call the capillaries of the system means an extension over this country of a network of wires and stations which is far beyond, I believe, the conception of anybody at this present time; and as regards that great system of capillaries, which I firmly believe might come into existence in this country in the future, I do think that it is beyond the powers of

Sir *Charles Cameron*—continued.

of even so great a department as the Post Office; and I think that, perhaps, it might be wise (of course it is a matter entirely of arrangement) for them to leave that entirely in the hands of private enterprise.

3417. But, of course, you recognise the necessity of safeguarding the financial interests of the Post Office?—I can see no difficulty in the system of royalties by various scales preventing loss to the telegraph service.

3418. Now, you have told us something of the effects of the monopoly. Have you anything to add upon that particular point with regard to the development, say, of telephony?—Well, sir, I think there were two forces acting since the year 1880 to prevent the development of telephony. One was the natural caution of the Post Office ever since Mr. Justice Stephens' judgment of 1880, in preventing by every means in their power the extension of the telephone, so far as they feared it would compete with their telegraph system. Anyone who reads the whole of the history of those years will recognise that the Post Office measures were all in that direction, and rightly so in the eyes of most people, from the point of view of revenue; but the other force that was causing the retardation of the extension of telephony was certainly the existence of a monopoly which had two forms; one was the possession of those wonderful patents, the power of preventing anybody else using them, and the fact that every sub-company was really the creature of the head company who owned those patents, and, therefore, the policy of that head company permeated the operations of the minor sub-companies and prevented anything like that extension which would have come into existence if they had been competing companies. As regards the efficiency of the service provided by the monopolists, I think so much has been said and so much has been admitted, both in the Press and by Mr. Forbes himself in this chair, that it is not necessary for me to go into the matter. If anyone wishes to read the letters of the late Duke of Marlborough on the subject of that efficiency, which appeared in 1882, I have put them together for that purpose. If the Committee would like to see them, they cannot help seeing that that inefficiency was more than realised by one of those few men who had entered into and grasped the subject fully.

3419. You have printed copies of the Duke of Marlborough's; will you please gives us copies of them?—Yes (*the same were handed in*).

Mr. *Grant Lawson.*

3420. The Duke of Marlborough was then starting an opposition company, was he not?—Yes.

Sir *Charles Cameron.*

3421. Before we go further, let me put this to you: Mr. Lamb gave us a sketch of the Post Office policy under various Postmasters General generally. When I examined him he did not give us a very full account, as I thought, of Mr. Raikes' policy; I asked him to supply the deficiency, and Mr. Lamb was good enough to give me a cutting of a question that was addressed to Mr. Raikes in the House of Commons on the 5th June 1889, which has a considerable bearing on this, and I got an extract from a speech of his which I have shown you before, dated 29th March 1889. Will you please first read the extract and then the speech, and give the references?—This is an extract, sir, from "The Times" of the 29th March 1889.

3422. In Committee of Supply, I think?—In Committee of Supply: "As to the telephonic system, the Courts had declared it to be a part of the Government monopoly in telegraphs. His predecessor (Mr. Fawcett) unfortunately stated in public that steps would not be taken by the Government to enforce the rights which that judgment gave them, and a state of things had thereby been created which required very careful handling so far as the Department was concerned. The patents, however, were likely to lapse very soon, and when they had run out that would be the time to make arrangements, which he trusted would differ in almost every respect from existing arrangements. With regard to telephones being put into post offices, that was subsidiary to the larger question. In some parts of England the telephonic system was under the control of the Government absolutely, and there it was, of course, comparatively easy to make arrangements such as had been indicated. So long as the telephone companies continued to ply their trade, it was not desirable, he thought, that the Government should commit itself to arrangements which might seem in any way to recognise or establish a vested interest, which he for one could not admit existed. The grievance of the public in this matter ought, no doubt, to be removed as soon as possible, and it should be done upon terms satisfactory to all parties."

3423. In that he expressly declines to recognise any vested interest; now, will you please read this, which is a question put by Mr. Chamberlain, and Mr. Raikes' reply, and give the date?—This is extracted from "The Times" of the 5th June 1889, under the heading "The Telephone Companies":—"Mr. R. Chamberlain asked the Postmaster General whether his attention had been called to the tactics by which the financial group now commanding the telephone system of the Kingdom had met his refusal to grant a licence to the Amalgamated Company originally projected; whether his attention had been directed to the amount of capital to be created under the new scheme, and to the high charges to the public that would have to be maintained in consequence, and to the proportionately enhanced price that would be demanded should the nation ever decide to purchase; and whether, under these circumstances, he will at once avail himself of the right reserved under the agreement with the telephone companies, and 'establish, extend, maintain, and work' a telephone system such as would gradually bring the advantages of this invention within reach of the masses of the people. He wished to explain that the clerks had omitted a vigorous adjective which he had inserted before the word 'capital.' What he wished to call attention to was that this capital was not represented by any estate in the form of plant, buildings, wires, or instruments. It was a paper capital and not a real capital. Mr. Raikes said: "In reply to the hon. Member, I have to state that I am aware of

Sir *Charles Cameron*—continued.

the proceedings of the telephone companies, and that the whole questions of the telephonic service of the country is engaging my serious attention. I am not at all sorry that this question has been asked, as it may serve to direct public attention to a matter of extreme gravity, with regard to which, expressions of public opinion may materially strengthen my department in protecting the public interest."

3424. Mr. Raikes, in these extracts, pointed out that the patents were about to expire, and that that was rather a time for a change of policy; that was in 1889, I think; would you please mention the various efforts to compete which occurred about that time when the patents lapsed, or before that time, if you have any information upon the subject?—The effort which I have mentioned to compete was that of the New Telephone Company.

3425. That is before the Manchester Company?—There were several companies that came into existence that were either the actual children of or were absorbed by the United Telephone Company.

3426. If you would like to say anything about these companies before going on to the New Telephone Company, do; if not, please go on to the "New"?—I do not think that the history of each of those companies is worth going over unless the information could be obtained from those who know more about it than I do; that is to say, the details of it; but when we come to the year 1890, as soon as the patent rights expired, efforts were made, particularly by the formation of an association for the protection of telephone subscribers, to bring about competition with the view of extending the efficiency and cheapening the service, particularly in London. In 1891 there was a correspondence in the papers in which the late Duke of Marlborough warmly joined; and in February, 1892, a company called the "Pioneer Telephone Company" was brought out with the object of securing certain agreements and raising capital for a projected company which was then foreshadowed, and called the "New Telephone Company." The Pioneer Company was brought out, I may say, by the Electric and General Investment Company, which was its parent.

3427. Was the Duke of Marlborough connected with that?—He was.

3428. Did that company approach you, or were you officially connected with that company at all?—No; the only thing I had to do with it was that the Duke of Marlborough asked me to advise him as to the best mode of telephoning the City of London. It had been a subject which I had gone into in the year 1880 for Mr. Gardner Hubbard, the father-in-law of Professor Bell, who was in London; and at that time I laid out London for over one hundred exchanges. But the most difficult problem was the telephoning of the City, particularly as, by the year 1890, it was evident that the great mass of overhead wires ought to come down.

3429. You have brought us down to 1890, when you were approached by the Duke of Marlborough to plan out a system of telephoning the City of London?—In 1891.

3430. In 1891; now, before we go further, what was your idea as to the engineering arrangements of the present system; have they been definitely devised, or have they grown up as demanded, without regard to engineering considerations?—Yes, and to a most lamentable extent. So much was I impressed in 1880 with the necessity of laying out London for the future, and the certainty of irretrievable mischief to the telephones of London if it was not done, that I was led to draw up the plan which I have mentioned. I can only say that ever since then the telephones of London have been extended in what might be called a haphazard manner.

3431. Now will you please give the Committee an indication of the general principles on which you propose to lay out telephonic exchanges?—Might I begin by saying how I would not do it?

3432. Certainly; then let us know how you would. How would you not do it?—When I had put up an exchange, I should certainly endeavour to keep that exchange to the service of the area within which it was established. What really has always been the process of extending telephony in London has been this: A telephone exchange has been established, and then everyone within reach, or what would be called within reach, by wire, has been connected. The consequence is that you have a distorted spider's web round that exchange; and those distortions once carried out, that is to say, wires some a quarter of a mile, some two miles, others three miles, all stretched out in directions to reach the customers that might happen to be within reach, producing a system which in the end must mean confusion. I do not know that I can describe it better than that.

3433. Before you go farther, the result of that system is that you have a huge number of subscribers brought together, most of whom have no desire to communicate with one another, at the same point, and difficulty and delay and confusion?—That is an additional objection, or rather an additional instance of how the confusion that exists has been brought about; in other words, there is no selection of the clientéle of the exchange, and I think that has already been spoken to in evidence before the Committee; that is to say that one class of people may wish to be in communication with one another, and another class may wish to join an exchange with which their own friends are connected, and up to the present time the effort in London has been to bring everybody within the 630 square miles which the National Telephone Company boasts it covers into communication with one another under a uniform tariff.

3434. Then would you please explain, in the first place, just the principles on which you would proceed; you have told us what you would not do?—Shall I begin with the City?

3435. Yes.—The City was the most difficult problem, and it is the heart of London.

3436. Do you happen to have the plan?—I am afraid I came here not knowing I was going to be examined, and did not bring the plan. It is a very large plan.

3437. You have no objection to put it in?—Not the least.

3438. Is it a plan made in 1891?—That was made in 1891, yes; I think I could describe in a few

Sir *Charles Cameron*—continued.

few words sufficient for the Committee to understand, if I might begin with the City.

3439. Certainly, begin with the City; begin as you find most convenient?—I pointed out to the Duke of Marlborough that to place wires underground in the City of London was probably one of the most difficult operations in the world. I knew as much, I think, of the underside of the surface of the streets of the City as the engineer himself. I told him that one great central exchange for the City was simply an impossibility within the confines of the City, because it was impossible to lay down radiating from one centre in such streets a sufficient number of tubes to carry the circuits which would probably be required.

3440. In order to meet that difficulty, and these circumstances, what did you propose?—I proposed to him to establish eight telephone exchanges situated at points in the periphery of the City, and when he suggested that eight points were not as good as one, I explained to him that it made no difference if there were eight exchanges at eight points in the City in place of eight exchanges in eight rooms in one house. He saw the force of the argument, and he asked the City of London Electric Lighting Company (of which I was then the engineer), in laying down their system of mains for distributing electric light, to put in tubes which they might call their spare tubes, or whatever else they might be used for, but, at any rate, to put in tubes in the same trenches in sufficient quantity to meet a possible future demand in the event of the Commissioners of Sewers approving of their spare tubes being used in that way. I may say he entered into similar agreements with all the electric lighting companies in London for the use of any spare space they might have available in their systems.

3441. Now, we have been told by several witnesses that this electric lighting company surreptitiously laid down tubes. The matter has been described to us as something that was done in an underhand and unjustifiable manner. Will you please let us have your version of the matter?—There was nothing whatever surreptitious in it, for I imagine the streets of London were never disturbed in the same way as they were during the winter of 1891 and 1892. There were miles of the streets of London then under the condition of excavation. Anyone going or coming could have seen the number of tubes that were being put in, and, moreover, a return of what that number was, was weekly, if not daily, sent in, not only to the engineer of the Commissioners, but also to Mr. Preece, of the General Post Office. I do not think there was anything surreptitious in that.

3442. I do not think the Post Office has complained of anything surreptitious, but witnesses and other bodies have spoken of it ("surreptitious," I think, is the word used), and you tell us that everything was done in the most open manner, and reported upon as done to the engineering authorities?—Of course the City of London authorities did not know, or could not say that these tubes were destined for the use of the telephone, but they were laid down as spare tubes, and the Duke of Marlborough, wishing to

Sir *Charles Cameron*—continued.

have power to use these, if permission could be obtained, secured that power for the Pioneer Company, which I have already referred to.

3443. He obtained a power?—Yes; from the Lighting Company.

3444. From the Lighting Company, subject to whatever rights any local authorities might have in the matter?—Quite so.

Lord *Stanley.*

3445. Were these extra tubes laid down only because of the agreement between the Duke of Marlborough and the Electric Lighting Company. Would they have been laid down if there had not been that request made by the Duke of Marlborough?—There was no agreement at the time the greater part of these tubes were laid down.

3446. We will leave out the question of agreement. Without the request of the Duke of Marlborough, would those extra tubes have been laid down. Without the understanding that apparently existed between the Duke of Marlborough and the Electric Lighting Company were these laid down?—Allow me to answer that question in this way: I was a very strong advocate when once the streets of the City were taken up for putting down all the tubes that could be got in. I know all about a company in New York that Mr. Preece has referred to, and I knew quite well that it was absolutely necessary once you did this work to get all you could in, as it never could be done again; therefore if my advice had been taken these tubes would have been laid down without any suggestion of the Duke of Marlborough, but there is no doubt he was very strong on the question of telephony at that time, and that he had in his mind the idea that they might be used for telephone purposes.

3447. And the directors of the Pioneer Company or the directors of the Electric Lighting Company did not act simply upon your advice, that they should put down as many tubes as they could at once, but they acted in consequence, as I understand, of a suggestion from the Duke of Marlborough?—I think that is the way to put it.

3448. The Duke of Marlborough was chairman of both companies, was not he?—He was not chairman of the Electric Lighting.

3449. He was a director of one and chairman of the other?—Yes.

*Chairman.*

3450. The authority to lay down the tubes was an authority given to lay down electric lighting tubes, was it not?—Quite so, under that Act.

3451. And confined to electric lighting purposes?—Yes.

3452. They had no authority to lay tubes for any other purpose than electric lighting?—No, they had no authority to destine them for telephones at that time.

3453. Therefore, so far as these tubes were laid and intended to be used for the purpose of telephony, it was outside their legal powers and without authority from the Commissioners of Sewers who had control over the streets?—Yes,

*Chairman*—continued.

so far as they were destined for telephone purposes.

Sir *Charles Cameron.*

3454. There was nothing illegal or improbable in thinking that the consent of the Commissioners of Sewers would have been subsequently obtained to the use of those tubes that were not required for lighting purposes for the purposes of telephony, and getting rid of overhead wires and improving the telephone service?—I have not followed the correspondence since between the Lighting Company and the Commissioners of Sewers, but it seems to me to be entirely in the interests of the City that these extra tubes should have been laid down once and for all.

3455. In any case, you had no reason to believe, and the Duke of Marlborough evidently had no reason to believe, that it would be impossible to get the City authorities to consent to the use of the tubes?—None; and I might add that the Lighting Company did not bind themselves entirely to give those tubes to anyone; in fact, a good many of them have been since used by the Lighting Company; they were simply a very large quantity of spare tubes laid down on a certain system to be useful for that purpose, if required.

3456. And that system, to a certain extent, designed so as to lend itself to the purposes of telephony, if required?—Yes.

3457. Further on that point. You are aware that the Commissioners of Sewers have had negotiation with other telephone companies regarding permission to use those tubes for the purposes of telephony. It was mentioned in evidence?—I daresay.

3458. You do not know it?—No, I think Mr. Somebody's name was mentioned as in negotiation.

*Chairman.*

3459. Mr. Harry Foster's name was mentioned?—Yes.

Sir *Charles Cameron.*

3460. It does not matter anything about the person, but if they have since then entertained the project of granting permission for the use of those spare tubes for telephonic purposes, it rather bears out the expectation of the Duke of Marlborough that they might have been induced to give that permission earlier?—I never thought that they would not be willing to give it on terms.

Mr. *Benn.*

3461. On this point of the tubes, may we take it that with the use of these tubes, or such tubes, your scheme for eight exchanges for the City could have been carried out?—Certainly.

3462. Without the abomination of overhead wires?—Yes. Every overhead wire in the City, except those that were in back streets, and the single wires connecting the individual subscriber, would have been brought underground.

3463. And there is no reason to-day why that should not be done, if these tubes were available?—None.

Sir *Charles Cameron.*

3464. I think it might be well here to take this: You have got a great deal of information about the costs of underground wiring, I believe?—Yes.

3465. In the first place, how many wires would your tubes have contained?—The length is 147 miles of 2½-inch tubing, and they are capable of holding 12,500 miles of twin wire conductors, and the whole of the tubes, as given in the annual reports of the City of London Electric Lighting Company (the published reports) is that which I estimated, namely, 69,000*l.*, or a little over 69,000*l.*

3466. Am I right in saying that the City of London Electric Lighting Company went to the expense of this 69,000*l.* for spare tubing largely in view of the proposal of the Duke of Marlborough to utilise these tubes for telephonic purposes, if permission could be obtained of the authorities?—I think I have said yes to that already.

3467. I wish to make it perfectly clear?—The cost of the twin wires would be 80,850*l.*, when drawn into these tubes, giving a total of 149,850*l.*, or 1,020*l.* per mile. Each twin conductor will then cost, when laid, 12*l.* per mile. This is actual work. It is not guess-work in any way. The underground conductor of each subscriber, assuming that the average would be 0·446 of a mile, will incur a capital outlay of 5*l.* 8*s.* 6d., if you have 28,000 subscribers, for which this system of tubing within the City is capable of making provision.

Mr. *Benn.*

3468. Twenty-eight thousand in the City only?—Twenty-eight thousand in the City only.

3469. That is to say, the square mile of the City?—Yes; within the square mile of the City you could provide for 28,000 subscribers, including a very ample service of trunk lines.

Sir *Charles Cameron.*

3470. Will you repeat the capital per subscriber?—The capital outlay would be 5*l.* 8*s.* 6*d.* I add to that for overhead work (to continue each conductor overhead into the subscriber's office) the sum of 1*l.* 14*s.*; the equipment and fitting up of the subscriber's stations, 4*l.* 10*s.*; the share of the cost of the exchange, 2*l.* 10*s.*; making a capital outlay (that is cost price, and without engineering profits or general charges) of 14*l.* 2*s.* 6*d.* per subscriber in the City of London.

3471. Do you happen to know what has been given as the cost elsewhere?—£16. 16*s.* in Glasgow, and 55*l.* Mr. Preece gives in London.

3472. Your figure is 14*l.* 2*s.* 6*d.*?—The difference between us cannot be entirely attributed to engineering profits, general charges, and so forth, but there is a very considerable difference between his estimate and my figures, which are founded upon facts. Now, might I go on about these eight exchanges?

3473. Yes?—These eight exchanges, each of which would have 3,000 and odd subscribers for the City itself, would be capable of serving subscribers outside the periphery of the City to a distance of three-quarters of a mile. I should estimate

Sir *Charles Cameron*—continued.

estimate on the north and about half-a-mile on the south of the river, so that there is the nucleus of a system in existence which ought to serve 50,000 subscribers, taking the area outside the city of, as described. I say the "nucleus" because the tubes outside which would be laid much more easily than they could be laid inside in the streets of the city have not yet been laid, but they could be at the same price.

3474. And that without any increasing difficulty of working which is entailed by crowding everything into one monstrous switch-board?—Well, that is a question which Mr. Preece has described to you, but I think he has omitted one or two points and exaggerated one or two others. I do not regard there being any difference between what I have said before, having 28,000 subscribers in eight rooms in one house and having them in eight exchanges at different parts of the city; in other words the difficulty of numbers in an exchange is subject to other laws besides those mentioned by him. It is a question entirely of the sub division of the demand by having a difference of tariff, what might be called original tariff.

3475. Just to make the thing clear, will you please look at that map on the wall representing Lancashire and West Yorks, and let us consider how that is worked. You have Liverpool, Manchester, Bootle, Bradford, Burnley, Preston, Leeds, Sheffield, and a number of other towns; if those towns were all closed up together it would give you something very like London, would it not?—Yes, if you could squeeze them all up you would have something like London.

3476. And if London was broken up into bits and spread out in that way you would have what exists on the map?—Yes, something like it.

3477. And if you had London spread out as is the case with the different centres on the map you would have something very like what you propose?—Yes.

3478. Will you please tell us how it is worked: Supposing a man in Liverpool wishes to subscribe to the system of Liverpool he simply has the Liverpool list, does he not?—Yes.

3479. If he wants to communicate with Sheffield, Leeds, Blackburn, Burnley, Preston, Manchester, or Salford, he pays a toll?—Or he pays a larger subscription as they do in Berlin.

3480. He pays a larger subscription as they do in Berlin, or as they do in this country all over the provinces, he pays the toll?—Yes, he pays either a toll by message, or by talk, or a larger subscription.

3481. But as a matter of fact the arrangement that is adopted by the Telephone Company, certainly in Scotland, and I have no doubt over this area, is that there is an exchange which for a subscription serves a certain small area and which serves an area as wide as trunk lines can carry it purely on the toll system. So that if you had London subdivided in the same way and brought together and made one big London, you could quite well work it without any change in the acknowledged system of telephony, and the understood system of telephony by small charges for limited service and tolls for any expansion of the service desired?—Yes, particularly if London had been laid out originally for such a system of working.

3482. And if your proposal had been adopted, it could have been worked quite well on that system?—I have not the least doubt of it.

3483. And a person in a given district, having his business chiefly concentrated in that district, would under your system have paid a small subscription to a local exchange, and under one arrangement or other, either by tolls or modified subscriptions (but I take it by tolls because it is an understood arrangement), he would have been able to communicate wherever he wished?—Yes.

3484. And without any more inconvenience than under the present system?—Certainly, and with very increased convenience to the work of the exchanges.

3485. With very increased convenience to the work of the exchanges and at a very much reduced price?—Certainly, because his standing charge would be a minimum charge. I might also say there is no reason why in addition to the toll system there should not be a time-meter system.

3486. I merely wish to make clear the toll system because the toll system exists?—Yes.

3487. But there are other methods which could be adopted; will you explain, for instance, the time-meter system?—There is no time-meter system at the present moment. Invention has not reached such an extent as to complete or perfect such a thing, but there have been various suggestions, and if invention was as strong as it might be made by competition, or if the demand was as great, I have not the slightest doubt that Mons. Mercadier, of Paris, would long ago have produced a time-meter which would resemble any other ampère hour-meter, and would register the time during which the telephone was in use, which could be taken down monthly and charged for just in the same way as your gas is charged for.

3488. We were told by Mr. Preece the other day that at Buffalo they pay a certain amount, or charge, I think, 70 dollars, and so much a conversation after that?—Yes.

3489. That conversation could be registered either by booking it at the time, as is done here, or by an automatic register?—Yes, or by an automatic register, either by talks or by time.

3490. I believe a difficulty has been raised as to the trouble that would be inflicted on the Post Office in connection with the adoption of any such system; would any additional trouble be necessarily inflicted?—Do you mean as regards the tariffs?

3491. No, not as regards the tariffs. The tariffs are laid down, but I understand it has been objected that if there were two or three companies working in a town, the Post Office would require to have a number of different lists, and have an immense lot of extra work entailed upon them?—But for the amalgamation between the National Company and the New Company the Post Office would have had to have worked with two Companies in London. It says in the prospectus of the New Company that the National Company "has entered into an

Sir *Charles Cameron*—continued.

an agreement with this Company by which it is provided, among other things, that the subscribers on the one system shall be able to communicate with those on the other system." There was an evident intention of having two systems in London when that was written.

3492. But you are aware that the agreement between the telephone companies, and the Post Office contemplates that and makes provision for terminal charges?—Yes.

3493. But the point that I wished to bring out was this: The Post Office at the present moment, and whether there were two or 10 companies in one district, would be given, not a list of names which it would have to look up, but a number in the place to which the message was being sent; is not that so?—Yes. I do not think that Mr. Preece was quite impartial in what he said on that subject. I do not know whether I can waste the time of the Committee by looking it up now, but in describing the inconvenience he said that, amongst other inconveniences, there would be, if the Post Office was connected, firstly, with systems under the control of different undertakers at each end of the trunk line, and, secondly, if they were connected with several systems, or more than one system, in the same area at one end of the trunk line, and he described one of those inconveniences as having to be in the possession of a large number of lists. Now, the Post Office need have nothing to do with the lists of the undertakers of the various telephone areas. They will simply have to put a trunk wire through from one system to another system. It will be the owners of the exchange system who will be responsible to their subscribers for numbers and lists, and so forth, and for the identification of individuals. and I do not see that would cause the least inconvenience to the Post Office. As a telegraph engineer, I quite realise the inconveniences of having to communicate with a large number of superintendents instead of, as Mr. Preece described, with one central superintendent in London (that goes without saying); but that it is an insuperable difficulty, or one which a great department like the Post Office cannot overcome (considering the enormous number of authorities with which they now do communicate, the railways who maintain their wires, and so forth). I extremely doubt; in fact, I am quite certain they could overcome it.

3494. In order that the Committee may thoroughly understand the present system, let me ask you this: I forgot to ask you one or two details in connection with the working of the toll system. On messages, we will say, transmitted by a Glasgow subscriber to Edinburgh, Greenock, or wherever it might be, you are aware that any persons subscribing to an exchange can become a trunk-line subscriber on depositing 1*l.*, I think, with the telephone company?—I believe that is the system in the case you have mentioned; in fact I know it is, because I use it.

3495. And the trunk-line subscribers have the right to speak through anywhere where the telephone can carry him on payment of certain tolls which are charged against him and booked by the telephone company?—Yes.

3496. The toll is charged against him, and an account is sent in at the end of the month, and they have got the security of his deposit to ensure the payment of their charges?—Yes.

3497. That is exactly what would occur, I presume, with trunk messages?—I think the Post Office requires always to be paid in advance for everything it does?—Their stamp system is very easily managed.

3498. There would be no more difficulty in working that than the Press Association arrangements where prepayment is not made with every message. You do not know that?—No, I do not like to make a forecast even of how the Post Office is going to work this enormous trunk-line system which they are destined to work; I think it is one of the greatest responsibilities in connection with the telephony of the future.

3499. Well, they are going to work it, and the question of whether there is or is not competition will not interfere with the difficulties of the task they have already undertaken?—I do not think their difficulties will be increased by multiplying the undertakers with whom they have to deal.

3500. And at the present moment trunk-line charges are booked and charged against deposits?—Yes.

3501. And that is a system that could work very well with the Post Office under an arrangement made with the telephone companies, who would be the collectors of and pay the tolls to the Post Office?—Yes.

3502. There is no difficulty about it?—No.

3503. You have told us about the provision that was made, and generally about your system; that you are against concentration, in favour of limited service and cheaper service and tolls; you have told us a number of advantages of the system; are there any others you would wish to bring out before we part from that?—I think one of the great advantages of having what you may call original tariffs is that you will immediately find that telephony will reach a class (and a class of work) which in this country it has never touched, even if it has got as far as the fringe of it.

3504. Are you referring to agricultural work?—Not only to agricultural but to domestic, to small tradespeople and so forth.

3505. I think we had better hold over that until a later portion of your examination. Now you have shown us how the understanding arrived at with the Duke of Marlborough led to the laying down of tubes with an intention that they should be used for telephone purposes?—Yes.

3506. The new company was launched, was it not, largely on the strength of an agreement entered into with a large number of telephone users?—I should rather say that the Pioneer Company was launched because under the conditions of the Pioneer Company nothing was foreshadowed to indicate that practically (I do not like to use a strong word, but I may be permitted to use it) faith was going to be broken not only with the public, but with those thousand and odd subscribers who were ready to come in under the twelve-guinea tariff that was promised.

3507. I will ask you to put in the prospectus of that company, but if you will please read those portions of it which are not purely matters of capital, but which are germain to any agreement

Sir *Charles Cameron*—continued.

ment the projectors may have entered into with telephone users?—The Pioneer Company was formed for the purpose of providing necessary capital for the New Telephone Company; I do not think they made any more promises.

3508. There is no reference made to an agreement?—Not in that one, and it was too late to make a reference to the agreement when the new one came out.

3509. An agreement did exist; will you please tell us what you know about that agreement. In the first place I will ask you this: there were a certain number of dissatisfied users who formed themselves into an association?—For the protection of telephone subscribers.

3510. For the protection of telephone subscribers; can you give me the date; you will see the date on the agreement?—The association, I think, was formed early in 1891; it became prominent; it canvassed freely in the City during the year 1891.

3511. It was registered as a limited liability company so as to give it a sort of status?—I believe so.

3512. And it made an agreement with the Duke of Marlborough's company; whether the Pioneer or the New Company I do not know, but you have got the agreement before you?—Yes, there was an agreement between the New Telephone Company and the Telephone Subscribers' Protection Association. I may say that the New Telephone Company was really in existence previously; it had been since 1885; it was resuscitated; and the agreement that was entered into between it and the Protection Association was as early as April 1892, which was shortly after the Pioneer Company came out.

3513. It is revealed as an existing contract in that prospectus?—Yes.

3514. Is the prospectus you are quoting from that of the Pioneer or that of the New?—The New.

3515. You have got a contract revealed as an existing contract in that prospectus with the New Telephone Company; would you please read us the contract?—This is a newspaper cutting, and the description says the "agreement runs as follows."

3516. Yes, it was signed by Mr. Haig, who was the secretary, I believe?—Yes, it is signed by three gentlemen. That cutting gives the whole position of affairs in December, 1892. At that time the New Company had come out (the Duke of Marlborough having in the interval died), and had practically been handed over body and soul to the National Company.

3517. And the telephone users felt themselves "sold"?—Aggrieved, yes.

3518. One of the secretaries of the company, Mr. Haig, and Mr. Hastie and Mr. Jackson published a letter in the "Times" giving the terms of the agreement?—Yes.

3519. If you will give us the agreement it will be subject to correction if there is anything inaccurate in it. I want the Committee to hear it?—"An agreement made the 25th day of April 1892 between the Association for the Protection of Telephone Subscribers (Limited), hereinafter called the 'Association,' of the one part, and the New Telephone Company (Limited), hereinafter called the 'Company,' of



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the other part. Whereas the company has been incorporated to carry on the business of a telephone company, and is about to establish a system of telephonic communication in the metropolis; and whereas the company is desirous of obtaining the assistance of the association in procuring subscribers to the company's system aforesaid; and whereas the association has decided to give such assistance upon the terms set out in this agreement: Now these presents witness and declare as follows:—(1) When and so soon as the company, *i.e.*, the New Telephone Company, shall have established its system aforesaid, and shall be in a position to supply telephones in connection with that system, the association shall, upon the request in writing of the company, use its best endeavours to procure as many persons as possible to allow the New Telephone Company's telephone to be put up at the expense of the company, and such persons shall have, at the expiration of a given time, the option of becoming subscribers of the company's system aforesaid, and upon the footing that each subscriber shall undertake to pay to the company a sum not exceeding 12*l.* 12*s.* per annum for the use of the telephone supplied to him, and of the privileges incident to subscription to such system upon agreements for a period of one, two, or three years, at the option of the subscribers, such subscribers as aforesaid to number not less than 1,000."

3520. Do you happen to know at that time what the cost was?—The National was certainly not under 20*l.*

3521. And then how does it go on?—"In consideration thereof, the company shall, when and so soon as the association shall have secured such 1,000 subscribers, forthwith supply at the expense of the company to every member of the association only who shall require the same, directly or through the association, within three months thereafter by notice in writing to the company, a proper and efficient telephone connected with the system of the company, such telephone to be deemed a loan, and every such member of the association shall be entitled to the privileges of using such telephones and of exercising all the privileges incident to subscription to the system up to the expiration of the year's subscription of such member to the National Telephone Company (Limited); that is to say, for the year current when such telephone is put up by the company or for three months, whichever period shall be the longer, and every such member of the association shall be at liberty to terminate this arrangement at the end of the said year current or at the end of three months, as aforesaid, without any payment whatever," and so on.

3522. We will explain that; the meaning of that was that the New Company would give a greatly reduced service, that it would put its wires in on approval, that it would make no charge while the subscription to the old company was going on?—Yes.

3523. So that to all those subscribers who were at the time subscribers to the National Telephone Company, until they were free from the other telephone company, it really cost nothing?—That was the object of it.

 3524. Their

Sir *Charles Cameron*—continued.

3524. Their second telephone would cost them nothing, and they could then go on to the New Telephone Company on advantageous terms?—Yes.

3525. That was a very advantageous offer, was it not, to telephone users?—Twelve guineas.

3526. Yes, and I say it was a very advantageous offer to telephone users?—Well, one of the great features of the New Company was that they promised a twin-wire system at once.

3527. But, independently of that, they promised a better service than the old company; they said: "We will put up our instruments in your house on approval. We will not charge you anything so long as your old subscription is going on, and if you do not like us at the end, you can kick us out"?—I call those very good tactics for a competition; natural tactics.

3528. I am not talking of "a competitor," it was a capital thing for the telephone user, was it not?—It was a capital feature of the telephone in London, because the new system would have come into existence; but it never has done so.

3529. What I wished to bring out was that these gentlemen who signed and became members of the Protection Association made a bargain, which was of great value to themselves?—Unquestionably.

3530. What I wished to ask you was this: Was that bargain ever fulfilled?—I should like to say, not to my knowledge; but I feel quite certain that it never was.

3531. But, as a matter of fact, does not the letter go on to complain that the company was swallowed up through the advance of the monopolist company, and that the 1,700 people were left in the lurch?—They were left in the lurch entirely.

3532. By the opposition company, whom they were created to compete with, giving them such terms as induced them to allow themselves to be bought up?—I think what has happened in the last two years is clear evidence of it.

3533. Now, will you explain to us what did occur. When you were in the matter you understood that there was to be *bonâ fide* competition?—Entirely. Until the prospectus of the new company appeared I had not the remotest idea what was going to be done.

3534. And when it did appear it gave you an idea?—It did; it gave me a very considerable shock to think that anything could have been perpetrated of the kind.

3535. In what way did the prospectus lead you to suspect the intended amalgamation?—That printed correspondence which I have handed in explains that.

3536. A committee is always more ready to receive correspondence than to read it, therefore will you just give us briefly an explanation of it?—The best way, in the fewest words, and to save time, is to point to the constitution of the board of directors.

3537. The board of directors were, to a large extent, the same, were they?—Half are the names of those whom I heard had been retained to be the directors of the New Telephone Company, and, if the prospectus had come out with those only, no one would have ever thought anything about it. They thought that the policy which had been enunciated up to that date was to be continuous, but when the prospectus came out with four gentlemen's names who were directors of the National Telephone Company, I think there was but one conclusion to be drawn from it, particularly as the National Telephone Company had taken up a very considerable portion of the capital.

3538. The National Telephone Company had taken up a very considerable portion of the capital, and that was announced in the issue, was it?—Yes; 244,000*l.* of the capital was taken up by the National Telephone Company.

3539. Had the National Company any "say" in the Pioneer Company?—I cannot tell you. I do not know what happened behind the scenes.

3540. But it did not, ostensibly at all events, come to the front?—No.

3541. And the Duke of Marlborough's plea with which he went to the public was that he was going to bring in competition?—Yes; those letters are the strongest evidence of that.

3542. Will you quote some portions of the correspondence to show his position at that time?—I am afraid I did not come down with all my newspaper extracts.

3543. Have you any letters marked?—Those letters I have handed in are his letters, written apparently with the intention of excusing himself for what he had done. The previous letters of 1894 were those in which he forecast what was to come.

3544. I shall not pursue the matter about the Duke of Marlborough's letters, but we have got the fact that there was an agreement made to give a very advantageous bargain to a very large number of telephone users, and that that bargain came to naught. Now, would you please tell us, briefly, so far as you know them, the circumstances that led to the promise coming to naught, and how the obligation was got rid of. You have told us that the National Company subscribed largely to the new company?—Yes; of course, I can only speak as one of the public.

3545. Yes, that is quite right; but the result was, at all events, that the new company went into liquidation, was it not?—I do not know that I can say even that; I have heard that.

3546. We can get that from the National Company?—Yes.

3547. But, at all events, these promises of improved telephonic service, so far as you know, have never been implemental?—That is so.

3548. Now, you know something about the Manchester Company?—I was asked in 1890 to go to Manchester to inspect the overhead wires of the Mutual Telephone Company, which was then brought out in Manchester, and their system, particularly with reference to what might be called a little boycotting that was going on, it is very easy to do that with overhead wires, running wires, so that one shall interfere with the other, apparently accidentally; I went down to see how far either company was injuring the other, having been asked to do so by the Mutual Telephone Company. Then I became aware of the conditions of their position, their capital being one hundred thousand pounds (100,000*l.*), and that they had called up and spent

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spent about 36,000*l.* in establishing a system in Manchester for which they charged rates to non-shareholders of 6*l.*, and 5*l.* to shareholders; and there were about 2,500 users of that system, as against, I think, about 2,800 users of the National system.

3549. In fact the thing was pretty equally divided?—Yes, about 2,500 and 2,800 were the figures; the National charged 10*l.* a year.

3550. Had it come down in its charge?—I think it had to come down to reach the 10*l.*; but at the time I was examining the system those were the rates of subscription.

3551. The Mutual was entirely a twin-wire system, was it not?—Entirely.

3552. Was the National?—I believe not; but I do not like to answer that as a matter of fact.

3553. As a matter of fact, do not you know that the "Mutual" was got up to provide the twin-wire?—Yes, but when you ask me as to an absolute fact, I do not like to answer unless I know. You can get an absolutely accurate answer on that from the National Company.

3554. As a matter of fact, the Mutual was twin-wire and quite a recent invention?—Yes.

3555. The price was 5*l.* for a shareholder and 6*l.* for a non-shareholder?—Yes.

3556. Did you ever see any of the users of that line?—No; I was not placed in communication with them.

3557. Did not you happen to hear of any complaints as to difficulties in getting on to other places?—No.

3558. Do you happen to know anything about the Newcastle system?—Only from my acquaintance with what the Post Office has done, which is perhaps more intimate than that of the general reader; I know what has been done there from reading the evidence besides.

3559. You know there is competition there?—Yes.

3560. But you have never heard of any complaints of difficulties brought about by competition?—Never; on the contrary: on that very question on which I have taken the trouble to inquire, the contrary has been the case. Those subscribers who wish to join an exchange—whichever exchange it may be—join the one which their business relations are mostly in communication with.

3561. Do you find the Newcastle people on the Post Office exchange complain that they are shut off from anything because they are not on the National?—I would rather not answer that question.

3562. Have you heard?—No, I have not; I cannot give you any information as to complaints.

3563. When you were in Manchester did you happen to make any inquiries as to that?—Yes. There I heard of the complaints of the National subscribers which had led up to the establishment, or largely led up to the establishment, of the "Mutual" with twin-wire and improved system to meet the defects of the existing system.

3564. Did you hear of complaints on the part of "Mutual" subscribers as to their being debarred from communication with others?—No, none; nor had I the opportunity of inquiring.

3565. You did not inquire?—No.

3566. Now can you tell us what became of the



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"Mutual,"—by the way did the "Mutual" pay its way, do you know anything about its finances?—No.

3567. It was ultimately bought up, was it?—Yes, it was a transaction of which I had no personal knowledge.

3568. But it became transferred?—It became transferred and I understand is now being worked in Manchester as a separate system.

3569. Are you aware as to whether the subscribers still enjoy the privileges of cheap subscription?—No; I cannot answer that question; I am not in a position to answer that.

Sir *James Fergusson.*

3570. Do you say the "Mutual" is now being worked in Manchester as a separate system?—I understand it is so; that the two net works are not made into one. The company will be able to tell you what steps they have taken towards making them into one.

Sir *Charles Cameron.*

3571. Now we will come to your proposals with regard to rural telephony; you have spoken about the benefit of cheap urban telephony for the small user, such as petty tradesmen, and so on?—Yes.

3572. And you claim that this system of limited service and tolls would enable such a cheap system to be given in towns as would bring telephony perfectly within the range of all these petty users, is not that so?—Yes, sir; I am a member of the Committee which had to deal with the question of light railways, and I had to deal with a very large area of purely agricultural districts, and even when the question of light railways, as being an assistant to agriculture was first mooted, it struck me that the telephone almost should take precedence of it.

3573. That is in the country you are speaking of?—In purely agricultural districts; and with that view I took a sample county, a purely agricultural district and made an estimate of what the cost would be to establish call offices at every hamlet and village in that county, connecting them with the market towns, and, of course, at the market towns the natural consequence would be connecting the exchange offices with the postal telegraph offices. But this was more with a view of meeting a want such as I have suggested. I have taken great pains to inquire amongst people of the farming class, the agricultural salesman class, the rural tradesman, and the persons who are the backbone of agricultural life. The idea has been new to them of being able to speak from village to village, it has never, perhaps, in most cases, been even suggested before; I have taken great pains to go into the incidents of their daily life, to see whether it would be worth while to pay, say, twopence for a conversation from their own village to the market town, or from their village to the next village; and the circumstances which occur to anyone living in the country, under which such assistance might be of use, are very many.

3574. Will you please just mention a few of those instances?—The village tradesman very often

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often wants to be saved going into the market town for his small purchases. The small village shopkeeper could very often sell direct to the villager on better terms if he could communicate with the supplier in the market town. The farmer would often not move produce, especially of a perishable kind, to the market if he could speak to the salesman, and ascertain the condition of things either that morning or anticipate it the day before. The question of the services of stallions and bulls all over the country is a rather difficult one, because they are frequently being moved without the knowledge of the necessity of the movement, and to be able to speak for 2*d.* to the person whose name is on the list, or whoever it may be, is a very great convenience. The migration of labour from one farm to another is a matter as to which it would be worth while for a man from time to time to pay 2*d.* to be able to speak to his bailiff about, and so on. I think anyone who lives in the country, and goes into the daily wants of farmers, as I have to do, can realise the large number of uses to which this could be put; and when the calculation comes out, which I have made, I think it strikes one as being feasible.

3575. Now will you please tell us what you estimate would be the cost of establishing these rural telephones?—I have taken, as I have said, one county in which there would be 29 exchanges.

Mr. *Grant Lawson.*

3576. May I ask what county?—Suffolk. There would be 29 exchanges and 450 call stations in villages and hamlets. The mileage of pole line (I assume that the Post Office where they have a pole line would be glad to let the way-leave on those lines) that would have to be erected would be 1,008, and the mileage of wires, including trunk wires between the exchanges, would be 4,031. Then I have taken a figure for the interest on capital, sinking fund, renewal funds, daily maintenance, and so forth—the capital cost of the system, which is 49,305*l.*, and all the outgoings would be 12,881*l.*, and if the charge was 2*d.* for every talk (within the county, say) you would earn that. If the talks brought in a gross revenue of, say, 2*s.* (it is 1*s.* 11*d.* really) a day, that would be 12 talks on an average.

*Chairman.*

3577. Per subscriber?—Twelve talks on an average at 2*d.*

Sir *Charles Cameron.*

3578. On the Exchange?—On the Exchange. Then I might remark, sir, as regards these figures, they are very much below the rates on which either the Post Office or the Telephone Company would calculate the cost of construction.

3579. How is that; why? Will you explain why you venture upon taking a lower cost?—Well, I have (perhaps wrongly, but I think fairly) assumed that this would be undertaken by the County Council—that is to say, that if they could borrow 50,000*l.* and it could be shown to them that it would be a real advantage to agriculture,

Sir *Charles Cameron*—continued.

and if there was no charge on the rates it would be worth their while to establish such a system. I considered they would have to pay nothing for wayleaves, and that the wire and insulators would be of the like kind which I have used and which are well known on the Continent and used for telephones very largely in Switzerland; I call it permanent military telegraph material; it is very strong, very permanent, and for all such purposes would last as long as the much heavier and more solidly constructed lines of the Post Office. The Post Office necessarily have a sample of construction which they properly do not depart from.

3580. Can you give the charge per mile for the construction?—£30 per mile of pole with one wire, and 5*l.* per mile for each wire in addition, but I distinctly wish it to be understood that I do not provide in this case for a metallic return.

3581. In fact, there is no necessity for that in this rough work?—I cannot agree with Mr. Preece's evidence given before the Committee that no system of telephone is worth anything (I do not remember his exact words, but to that effect) without the twin-wire or the metallic circuit. There are a large number of miles of wires in Berlin and in the larger towns in Germany where there is no twin-wire; they never think of it.

3582. At all events it would give something to the rural districts which would be as good as, until very recently, has been provided for towns?—Yes, better. Take Norway: groups of farmers there have provided themselves with lines and exchanges at their own expense, and it comes to far less than I have put down here.

3583. Have you got the actual figures?—No, I have not, I worked the cost out approximately, and it comes to something very small; I could hardly credit it. Their poles cost them nothing, for one thing. In a county like Suffolk there is plenty of timber grown on the spot. The Post Office very rightly use creosoted imported timber for their poles, not only for the sake of uniformity but for other well-known reasons. There is the difficulty of getting the large Scotch fir. I believe any county council would get sufficient poles for such a line as this at 8*s.* and 9*s.* a-piece.

3584. Without going into details as to material and so on, that is a very strong argument, is it not, for giving licences to county councils?—That is my view. One hundred and twenty county councils are in existence; they are not represented, and I think if they were really roused to the possibilities of this being an assistance to their constituencies, I do believe that some of them would embark in it, and find it would be a very great advantage to them, and the cost not fall on the ratepayers if my calculations approach correctness.

3585. You do not wish to shove this down the throat of any county council?—No.

3586. But if one or two county councils who are not served at present with any telephone system chose to take up this, you think they should get the licences and be encouraged to do so?—I do.

3587. You

Sir *Charles Cameron*—continued.

3587. You are in favour, I presume (in fact you have told us so), of competition in towns, and I suppose you have no objection, have you, to that competition being placed in the hands of town councils as well as county councils?—Not the least. From what I have seen of local authorities, both in connection with telegraph experience and electric light experience, they are perfectly competent to get the very best assistance and to pay for it and to use it for such purposes.

3588. You are frequently in Glasgow; you see what the municipality has in hand there?—Yes.

3589. Do you see any reason why they should not manage a telephone exchange?—I know a good deal about tramways, as I daresay you know, sir, and in the way in which they manage their tramways they prove their skill.

3590. You know also a good deal about electrical tramways?—Something.

3591. And you possibly have heard that both in Edinburgh and Glasgow projects for electrical tramways have been opposed by the telephone companies on the ground that they would interfere with telephony?—Or produce induction. That is an electrical question.

3592. It is not the electrical question, but a practical question, that telephone system being in the hands of another company or another corporation to that which possesses the electric light system, the water system, the tramway system may lead to practical difficulties and clashings of interests. Are you not aware that there has been such?—No, I can quite well understand one reason why Glasgow wants to work its telephones, because it will be such an immense assistance to them that they will work them in conjunction with other things they undertake.

3593. It struck me that you rather underrated the convenience to the farmer of the system of rural telephones that you sketched out. It would, as a matter of fact, put every farmer who was on it in communication when the postal trunk lines are put on, with all the rest of the kingdom?—Unquestionably. The answer of course is: But you are not going to put up a twin wire system. My answer is: You would put twin wires up in any case in which it was desirable to communicate outside the county system; there is no difficulty.

3594. In every case would it not be perfectly easy for the Post Office to repeat the message?—Certainly; it would be a feeder to the postal wires, unquestionably.

3595. And there could be no difficulty in having such a trunk wire charge as would pay for repetition at the junction of the single wire?—None whatever.

3596. Repetition is a constant feature in telegraph work, is it not?—Most of our telegrams are written on perhaps four to eight pieces of paper before they reach us.

3597. And with the ideas under which the telegraph department acquired the trunk lines, sending out telephone messages, letters by express messenger, and so on—in fact, working the Post Office and telephone system together it would bring your rural subscribers within touch, of the whole kingdom, would it not?—I firmly believe that the Post Office policy of recouping themselves by charges is an excellent one, and I do not think that they need lose.

3598. Did you in your calculations take any account for the postal royalty?—No, I did not do that on purpose, because after the attitude the Government has assumed in referring to light railways in the Queen's Speech, I presume that for the first four or five years they would not impose any royalty on an undertaking which was partly in the interest of agriculture.

3599. Even if they did, you say that 12 conversations per exchange would only make a difference of 10 per cent., is it not so?—It would make 10 to 20 per cent. they might have to pay.

3600. To pay the royalty would only require two or three more messages?—That is all. I might say as to the administration of a county and all the police and road work, that I have spoken to more than one of the chief constables and surveyors on the subject of the assistance that such a system would give them, and the saving in the operations of the county council, and they quite allow that the figure I have put (I think I have not mentioned it to you) of 360*l.* a year is not an excessive figure for the county council to pay for these facilities; I have not put that in as against the 12,000*l.*

3601. Do you wish to make any remarks about the objections that have been raised to systems on the property of different undertakers being connected with a trunk line system?—I think it was Mr. Clare who said that he did not see how the telephone system of the country would work if systems under different companies or authorities were at each end of one trunk line. That was his first objection. Well, it is hard to understand why it should have suggested itself to him as a difficulty. It is quite true that the authority over the exchange system at each end of a trunk line would probably have to be dealt with locally by the local post office and not by corresponding with the Post Office in London; but in the case of a telephone system belonging to the Manchester Corporation and a telephone system belonging to the Liverpool Corporation, I do not see what difficulty there can be to the Post Office, who own the trunk lines, in adjusting the communication between those two. There need be no squabbling over it. Then again he spoke of having two systems of exchange over one area. Well, sir, an immense deal has been made of that; in fact, it seems to me to be the key of a large amount of the evidence which has been given up to now. It is quite possible, in my view, that it might be an advantage to have more than one telephone exchange within the same area. If there was anything like the multiplicity of subscribers that this invention ought to have brought into existence, these (what I might say again are) capillaries of the system, would require more exchanges. Small exchanges in the future will, we hope, deal with the daily wants of the people living in those areas. The people for whom naturally the long-distance speaking is required, are quite in a minority; they are not the majority who will use the telephone in the future, and the fact of there being a second exchange in

Sir *Charles Cameron*—continued.

the same area may actually, as I say, be a convenience; that is to say, the persons who use the one exchange will use it for their social and domestic daily work, and if they want to get outside that area the Post Office will readily give them the same facilities that they will give to the other exchange system that is occupying the same area. And suppose there is a want of intercommunication. Let us assume, sir, that what was intended in 1892, when the New Telephone Company's prospectus was issued, was that there should be two great systems in London. Let us assume that that had been carried out: those two companies foreshadowed that they would work harmoniously and put their subscribers through to one another, and as to the complication that has been described it is very doubtful whether it would exist. For instance, if I was on "A" system, and I wanted to speak to a subscriber on "B" system, I should know, as a matter of course, that it would cause a definite and certain delay. We are told that in Stockholm they do not mind two hours' delay; that they have to put down their names on a list to get through to certain people. It shows that if that admirable system that exists in the States of instructing your subscribers was carried out here you would find they would soon understand the delay when they required to speak to somebody on the other system.

3602. Is it not rather an argument against the efficiency of the present system that such a very simple expedient, and such a very obvious expedient, advocated by a gentleman of such very high authority as Mr. Preece, has never been adopted by the existing companies with a view of facilitating the operation or working of the telephones?—I only say that I do not think telephony has ever had a chance in the United Kingdom. That is my only answer to that; it has been blighted from the very beginning in every way. One instance does not occur to me in which it has received, not only from its promoters but its users, the encouragement you might expect in any industry of the kind.

3603. Is the result that it is very much less developed in this country than in any other?—The public do not know anything about it; it is only to them a nuisance as a rule.

3604. You think London is especially badly off in that way?—Especially it is a much more difficult problem to tackle; and I should like to see it tackled by the one body I believe capable of tackling it, that is, the Post Office. If they began now, and the country gave them four years to do it, I think we should probably have the most admirable system in the world in London.

3605. You think, and I think there is a great deal in your view, that London stands on a different basis to the rest of the country, that there is an amount of capital invested on telegraphs in London that is not to be found elsewhere, and that it is even doubly and trebly important to protect the telegraphs in London against competition from the telephone system without, of course, interfering with the efficiency of the telephone system?—Yes.

3606. Do you think London should be differently treated to the rest of the country, and that there, if anywhere, the State should at once

Sir *Charles Cameron*—continued.

intervene and buy up?—My only hope that the telephone in this country will reach the position that it ought to have reached, and of its recovering from the depression and blight it has been under, is that the Post Office will this year or next year, or within three years, decide to take over the whole system in London and remodel it from beginning to end.

3607. Do not you think it would facilitate greatly any proposal for purchase if the Post Office were to adopt a policy of giving licences under conditions that would absolutely prevent their being bought up by other people?—But is not that a *sine quâ non*, that there is to be no more purchasing or selling of licences?

3608. That would be, of course, if the State took the monopoly?—There would be no more licences then.

3609. There is not one word of that in the agreement; the agreement does not at all interfere with the rights of the Postmaster General to give any licences he likes. You have not looked at that portion of the agreement?—My feeling or belief was that no more selling or buying of licences was to be allowed.

3610. Selling or buying of licences?—Yes; or absorption, or whatever you like to call it.

3611. This Committee has to consider whether the policy of granting competing licences should be recommended. Of course I imagine every member of the Committee would be against granting any licences that could be bought up?—Yes; that I quite foresee.

3612. What I say is this: does it not appear to you that it would greatly facilitate the purchase of the entire system, or a portion of the system as it exists in London, if the Post Office reverted to a policy of giving competing licences?—Well, I have read all the answers that have been given to similar questions to that you have now put to me, sir, and it is entirely a question of what the systems will be worth at the end of 16 years. If there are two systems, as has been said, within one area, the Post Office would have the option of buying either one of them, but I doubt if the public would be so well served in this case.

3613. In what way?—Whether you have one licence in an area or two, as the 16 years approach completion an inevitable starvation will begin.

3614. But have you any idea, from your experience of telephony, what may be the development of telephony in 16 years?—I can form no conception of what it would be, except under two conditions, one under unlimited competition, the other absorption by the Post Office; then I hope it will reach what it should be.

3615. Assume unlimited competition: Is it not a fact that proposals have been made (and I think even Mr. Preece has looked carefully into that) for telephoning without the aid of wires at all?—Well, Mr. Tesla discussed that with me two years ago, and although it is not within scientific probability even yet, he referred to a condition of things which might bring about the possibility of communication between points on the surface of the earth without wires or any conductor at all.

3616. What I merely wished to ask you was this: whether the recent advances of science in the

Sir *Charles Cameron*—continued.

the matter of telegraphy and telephony are not sufficient to justify one in saying that at the end of 16 years the machinery that was up to date 10 years ago, or that may be even up to date to-day, may find itself utterly out of date?—Unquestionably. You mean the ordinary plant now used for telephony may be all obsolete?

3617. Yes?—There are improvements in telephones now in existence which I think will, perhaps, replace all the existing telephones.

3618. And what you would like to see is an ample field for competition?—Yes, in default of purchase by the State.

3619. As you are an expert on this subject, I should like to put this to you: You heard Mr. Preece's evidence, and there are certain points on which you do not exactly agree with him, and certain points on which you would wish to corroborate him; will you please let us know the points on which you disagree with him?—I have not got his evidence here; but there is one thing which both he and Mr. Lamb referred to, and which I have alluded to already; that is, the increased capital cost on a telephone exchange in proportion to the increase of subscribers. I do not catch that Mr. Preece gave what that was, but I think his reference to it even is an exaggeration of the facts. It is quite true that the unit of a telephone exchange is two subscribers; and for every additional subscriber, up to 10,000, or whatever it may be, so-called complication and labour increases, but its cost is nothing like in the ratio that was suggested, and it has not yet approached the position which has been suggested of dislocation, and I should hope that it is not likely to do so. I do not know why it was put forward, except as a reason for saying that we have got too many telephone subscribers in the United Kingdom already, and do not want any more, because badly designed and worked telephone exchanges are said to be dislocated by the large number of subscribers. If that was the reason for which it was put forward it seems to me to be almost a hopeless view to take of things. It is a hopeless view if you are going to put every one of a limited number of subscribers within 630 square miles in communication necessarily with every other subscriber, with only a few exchanges; but then that is such a wrong view to take of the whole question.

3620. On the system you propose that difficulty does not arise in the least?—Not in the least.

3621. You disagree with Mr. Preece as to the date when the value of the twin-wire was known—that is merely theoretical?—Yes, entirely.

3622. As to the question of iron for twin-wires and the small systems, you have not told us about the distinguishing of voices, but you have told us about the truly rural areas?—Mr. Preece has done great work in connection with long-distance telephony, and, of course, it is infinitely the most attractive, because it is the most scientific; but I think where he uses his experience in connection with that and applies it to all telephone exchange systems, it is an exaggeration, because while all these conditions that he speaks of as being fulfilled by twin wire, copper wire, and so forth, all hold good in the extremely intricate and difficult question of long-distance telephony,

Sir *Charles Cameron*—continued.

they do not hold good in the small local areas, and connections to the exchanges that I am thinking of, and which I suggest will be the most numerous.

3623. Is the wire you propose to use in agricultural exchanges iron?—No. I should use phosphor bronze.

3624. You have told us your views about the cost of underground twin-wires in pipes, and you gave us estimates?—I did not give you mere estimates; I gave you actual figures, at least as to that part which was most difficult to estimate was actual cost.

*Chairman.*

3625. That is the actual cost of putting these extra tubes in?—Yes, sir.

Sir *Charles Cameron.*

3626. You disagree with Mr. Preece; you have some criticisms to make on Mr. Preece's evidence as to the number of operators except under conditions to be described; what do you want to say about that?—I do not exactly disagree with him, but I do not think he has put it (shall I say) scientifically; he has left out the factor of time. It is all a question of speed. He says, I think, that one trunk operator could only work five trunk wires. Well, that is a question of time. If your telephoning is to be made costly by multiplying your operators, you must pay for it. The question is, whether there is not a very large constituency, even amongst the commercial world, who are ready to accept a less speed and pay less for it. The fewer trunk wire operators does not make the operation itself more difficult; it only makes it a slower operation, and that affects the whole of the operations from beginning to end.

3627. This is very much like the proposal that you made when we were both younger, nearly 20 years ago, before the Post Office (Sir James Goldsmid's) Committee for deferred telegraphs?—That is another question where the factor of time came in.

3628. And you laid before us an elaborate memorandum showing how deferred telegrams at a cheap rate might be worked and the Post Office wires utilised for those operations?—Yes. What we now call the "load factor" of the wire was high for parts of the day and very low for some hours of the day, and the idea was to get a uniform "load factor."

3629. As a matter of fact, your ideas upon that subject have been adopted in several of our colonies and dependencies?—In India and the colonies, yes.

3630. There is another point on which you and I found ourselves in accord at that time; that is the diminution of the price of telegrams. If I rightly recollect, you were the only Post Office witness who insisted upon the feasibility of that; you were one of them, at all events?—I do not say that; but that deferred principle I believe to be as sound now as it was then, and I believe it to be sound in telephony and everything else.

3631. You think that for long-distance telephony especially it would come in?—No; I am not disposed to cheapen long-distance telephony by making it slower during the busy hours of the

Sir *Charles Cameron*—continued.

day; but I think the Post Office might well consider a plan for charging less over their trunk wires at certain hours than they do during busy hours.

3631*. That is what I speak of; a man wishing to speak after five o'clock at night say, or three o'clock, after the busy hour, whatever it might be; you would have a great many people who would pay a shilling rather than three shillings, if they could get a cheaper rate by waiting a little?—Yes, who do not mind waiting.

3632. That is one of your suggestions?—Yes; if you have the deferred message, what I always called the second-class message; there were first-class and second-class messages. Might I go back to add to my estimate where you asked for the figures to follow the estimate I gave for telephoning the County of Suffolk? Assuming that the County Council were to go to the Post Office and ask the Post Office to put up a system to do this work; at the Post Office private wire rates, as published in the Postal Guide, the County Council would have to pay 24,000*l.* a year to the Post Office; a little over; they would have to pay 24,062*l.* a year to the Post Office as a rental for that system. I think that rather emphasises either that their rates are very high (and, comparing them with the German rates, they are very high) or else that my estimate is wrong.

Mr. *Grant Lawson.*

3633. What is your total estimate?—I say if the County Council earns 12,000*l.* a year on that system, nothing comes on the ratepayers. If they went to the Post Office to put that system up and rent it to them, they would have to pay 24,000*l.* a year for it.

Sir *Charles Cameron.*

3634. That is all you wish to say with regard to that?—Yes; and also I have left out in this calculation all private subscribers to the telephone exchanges that might be brought on in such a county; I leave out the profit on that in my calculation.

3635. Will you put in the New Telephone Company's prospectus?—Yes.

(*The prospectus was handed in.*)

Mr. *Benn.*

3636. You have told us that you have devoted special attention to London?—Yes.

3637. And that you got out a plan for the telephone service in London showing a hundred exchanges?—It did; approximately there were a hundred.

3638. For how many subscribers did you provide in that plan?—About 2,000 was the maximum which was then thought of, 2,000 subscribers per exchange; it was thought that was the maximum they would ever reach.

*Chairman.*

3639. For the City that is?—No, that is for the whole of London, the whole of the Metropolis.

Mr. *Benn.*

3640. So that in your plan for 100 exchanges you really provided for 200,000 subscribers?—Yes, 200,000 subscribers.

3641. You anticipate no difficulty, then, from such an enormous multiplication of subscribers?—No, because those subscribers would be classified.

3642. What is the present total for London, do you know?—I have seen it in the evidence.

3643. Under 10,000?—Yes, it is a very small figure.

3644. Do I understand you that this system of multiplying exchanges would largely minimise the difficulties suggested by Mr. Preece in his evidence?—May I preface my answer to that by saying my plan then was, in 1880, in the infancy of telephony, and I do not now advocate that number of exchanges, because I think that the conditions have changed, and my description of how I would provide for 50,000 in connection with the City on eight exchanges is a better description of what might be done.

3645. Then I will pass to that; you think that eight exchanges would be workable for the City?—I do.

3646. But at present there are in the City how many?—Four or five; I cannot tell you the number. I have no plan of the present system; there may be six or seven.

3647. The point I want to get is this: whether you are in favour, instead of this excessive centralisation which is said to be difficult and eventually prohibitory in cost, of rather multiplying your exchanges than centralising your system?—Yes, because it admits better of classification.

3648. You know probably that that line has recently been taken in Chicago with the service there?—I heard Mr. Preece's evidence.

3649. You do not know personally; you have not been there lately?—No.

3650. Then if the local authority, say, founded a system on the lines of that which you advised for the City, what do you think would be the number of subscribers which could be served without any great increase in cost under your system?—What I describe as having been already provided for in the City is 28,000 subscribers divided amongst eight exchanges.

3651. That is so?—If you regard the intercommunicating wires between those exchanges as trunk wires, irrespective of the distance between the eight points, that is only on a concentrated scale what the Post Office is now devising for much larger areas in the kingdom. There, I think, as Sir Charles Cameron pointed out, it means eight towns squeezed up into one town, with shorter wires between them.

3652. You gave the Committee some figures which you described as actual facts with regard to that City service, and after adding the several items you brought the cost out, I think, at 15*l.*, or under 15*l.*, a subscriber?—Yes, under 15*l.* per subscriber.

3653. The 5*l.* 8*s.* 6*d.* for the tubes is really an actual outlay; that is arrived at without any uncertainty?—Yes.

3654. And the other figures are based upon well-known cost of the subsidiary appliances?—Yes,

Mr. *Benn*—continued.

Yes, they are rather higher than the cost that is generally given.

3655. Now, I want to ask you whether, supposing the same facilities were given by local authorities outside the City area where subways do not exist; as you are aware, subways exist in a great many streets now: supposing like facilities were given by the local authority for the laying of similar tubes to those in the City, could you tell the Committee what the cost per subscriber would be outside the City area. Indeed, may I ask you this: Is it likely that it would be the same?—You observe that this cost is on the assumption that 28,000 subscribers would be provided for. Roughly, I have assumed that in an area of three-quarters of a mile outside the City you might expect 22,000 subscribers to make the whole 50,000, making 6,500 on each exchange. If the tubes were extended outside the area of the City and laid down in the same way as those that were laid down inside the City, they would cost in proportion more according to the diminished number of tubes in each trench. That I have not worked out in detail. I have a table which shows the cost of every yard of tube according to the number of tubes in each trench; that is to say, beginning at 1 up to 25; but I have not worked it out for you as regards all those streets which would have to be served outside, radiating from the margin of the City.

3656. But can you give the Committee any idea, based upon your experience in the City (which is actual experience), of what the cost of a similar underground service would be, say, for the area of the County of London?—I have not worked that out in full; I have all the data for doing it; it is a very big undertaking to do it.

3657. I did not know whether you could give any others than the City figures?—No; I only gave those I knew of.

3658. So far as the City is concerned, supposing it reached 28,000 subscribers, the difference between your estimate and that of Mr. Preece is something like 840,000*l.*?—Yes, it is very large indeed.

3659. So that what the City loses in the matter of capital outlay is represented by that figure; that is to say, supposing the City authorities decide to use these tubes (suppose they secured a licence from the Postmaster General), and were able to obtain them and provide the necessary fitments, your statement is that it would only cost for 28,000 subscribers 15*l.* a subscriber?—Yes, that is what it would cost them.

3660. The whole thing?—The whole thing.

3661. Comparing that figure with the figure which was given to the Committee by Mr. Preece, we get a difference of 840,000*l.*?—Yes, quite that. I do not know in the least how Mr. Preece made his figure.

3662. Now I want to come to the whole of London with regard to this financial aspect, which is very important. You told the Committee something about the tariff necessitated by the "mutual" of Manchester?—Yes.

3663. Manchester is not unlike London, is it?—Well, I have been over the roofs of Manchester and London pretty much, and they are very similar in some respects, except that in London they are rather older.

Mr. *Benn*—continued.

3664. The "mutual" was very successful, I think, as to dividend?—I have been told so. I do not know.

3665. The tariff was 5*l.* and 6*l.*, I believe?—£5 for shareholders and 6*l.* for non-shareholders.

3666. Can you tell the Committee whether, in your judgment, a similar enterprise to that of the "mutual" could be worked for "Greater London" at a similar tariff to a profit?—No. I always put the unit of tariff for London at 8*l.*; that has been my figure ever since 1884.

3667. £8 is your unit of tariff for London?—That is not for all London.

3668. No, that is for greater London, outside the City?—No, it is not for communication all over London. It is the unit of the region—London being divided into regions.

Lord *Stanley.*

3669. As was distinguished between Liverpool and Manchester?—Yes.

3670. You would have to subscribe 8*l.* for the West End, say, and 5*l.* for the East End?—Unless you lived in both you would not.

3671. Yes, surely?—If you want to go beyond Liverpool you must pay something for it.

3672. If you wanted to go beyond the City you would have to pay more than for speaking just within the area of one City exchange?—Perhaps I did not catch Mr. Benn's question to me. He asked me: Could not London be done for 5*l.* Then I said: My unit of subscription for London—the lowest subscription—would be 8*l.*; but it did not mean that that subscription would include the eight City exchanges.

Sir *Charles Cameron.*

3673. I think I might clear up the matter. Your proposed rate of subscription to your district, which would be analogous to Liverpool, would be 8*l.*?—Yes, the one exchange.

3674. Not the squeezed-up district, but the one exchange would be 8*l.*?—Yes.

3675. And a person would have the right to get wherever he liked, not only in London, but all through the country, on payment of through tolls extra?—Yes.

Mr. *Benn.*

3676. For instance, suppose you had an Islington region, that that region was the size of Manchester, and you had a tariff there of 8*l.*, if a subscriber desired to get into communication with another region it would not involve another subscription of 8*l.* a year, would it?—No, not another subscription of 8*l.* a year.

3677. If he wanted to go further afield he would have to pay for the convenience in some similar way to the payment made to the Post Office for the use of the trunk wire service?—Yes, according to his classification, either by toll for the time or by time for the talk.

Lord *Stanley.*

3678. Would it be cheaper than the present system?—Yes, if you choose to confine yourself

Lord *Stanley*—continued.

to your own area you would only pay 8*l.* a year; you pay for what you get.

3679. Suppose you do not confine yourself to your own area, but take in places all over London, it would not be much cheaper then than the National Company charge for all over London?—I think it is too little for the 630 square miles; I think I should charge more than they charge now, and meet the wants of an enormous number of people who only want to speak to a few, with an 8*l.* local subscription and tolls on talks beyond.

3680. But at a higher rate than the charge at the present moment?—If you are a subscriber to one system you pay the minimum charge.

3681. I understood you to say it was cheaper?—London would be divided into several regions.

Mr. *Benn.*

3682. You described that to the Committee as your capillary system, the country system?—I used that expression more with regard to the whole kingdom.

3683. The New Telephone Company proposed to deal with the whole of London?—They did eventually, because they made agreements with all the electric light companies who had spare conduits to hire those conduits from them; but I had only intimately to deal with the City part.

3684. The tariff they put out was for the whole of London?—Well, it was very vague what they proposed to give for the twelve guineas; there is no doubt they intended to give the whole City, but I think they would have revised it as to giving the whole of London before they had done. I think the uniform tariff system is altogether wrong for a place like London.

3685. That is to say, the "daily wants" people—those who only desire to communicate within a certain district—should have the opportunity to do so at a cheap rate, without bearing part of the burden of those who desire the greater luxury of either the long-distance service or of more extended communication?—Yes.

3686. If such a system were devised by the County Council of London, these tubes utilised and the streets used in a similar way, can you suggest why that should interfere with the proposed partnership between the Post Office and the National Telephone Company?—No, I cannot.

3687. Am I right in assuming that, if the County Council did that they would become equally an agent of the Post Office as the National Telephone Company is the agent of the Post Office now. My point is this: that if this privilege were granted to London to satisfy, say, the wants of the little tradespeople, "the daily wants people," as you have described them, is there any reason why that system should not be established without interfering in any way with the proposed arrangement between the National Telephone Company and the Post Office?—If I understand your question rightly, none whatever.

3688. I want you to understand it, because it is rather an important one?—The "daily wants people" have not been touched yet.

Mr. *Benn*—continued.

3689. And are not likely to be touched by the present high tariff of the National Telephone Company?—No.

3690. So that if the Postmaster General denied London, or any similar city, this privilege, he would be denying that which would not interfere, other than in a financial way, of course (I know that shares might fall, and that sort of thing, but other than in a financial way, it would not interfere) with the other system running side by side?—No; unless he took it up himself, for the next 16 years, certainly.

3691. Quite so; unfortunately we have not arrived at that. Then as to intercommunication; supposing such a system did exist, and communication was made with the Post Office system, you see no difficulty in arranging that?—None. The Post Office can have wires to their Post Offices through any organisation.

3692. Indeed, I gathered from one of your answers that such a system might prove very useful as a feeder to the Post Office system?—Originally the telephone was always spoken of as a great feeder to the Post Office system; then came the time when it was supposed to rob the Post Office system; now, I think the time is coming again when it will become a great feeder, because really the telephone system of this country only touched commercial business that the Post Office had been doing; and there is no doubt it did detract from that.

3693. Should I be right in describing long-distance telephony as a convenience, mainly for wealthy firms, and local telephony as rather a boon for the smaller tradesmen and worker?—Quite true.

3694. And in your judgment is it not rather unfair that the smaller class—the needy class—should be punished in the matter of telephone rates in order to contribute to that part of the service which is mainly used by wealthy firms?—It depends on the rate to which you are alluding. I think it is very hard on the small daily user of the telephone, the person we have been speaking of, that there should be conditions under which there is no inducement to establish cheap local telephones for him, and certainly there has been no inducement hitherto. I do not see why he necessarily should be saddled with the cost of the long-distance telephony, because that ought to pay for itself by the charges which are to be paid for it.

3695. Then you regard the alteration of the policy of the Post Office, that is to say, the attitude which is now taken up against competition, as rather disastrous for the local authority?—I think it is unpatriotic. I think the Post Office ought to be above all that sort of thing. It may give them a little more trouble, but they are prepared to take any amount of trouble from my knowledge of them.

3696. You think probably that the telephone service ought to be extended for the benefit of the people rather than to support the revenue of the telegraph service?—Certainly, in these days.

3697. I only

Lord *Stanley.*

3697. I only want to get really at the question of laying the extra pipes in the City, and I am not quite sure I understand the way first of all that leave is obtained; did you ask leave of the Commissioners of Sewers to lay these pipes?—Perhaps I had better answer the question by telling you the conditions under which the pipes were laid at all in the City. They were laid under an Electric Light Provisional Order; that was the power for taking up the ground.

3698. Under the Electric Lighting Act?—Yes.

3699. Therefore, under that Act, power was given to lay pipes for electric lighting?—Yes.

3700. In addition to that, pipes were laid which it was given to the Commissioners of Sewers to understand were for electric lighting, but which, under an understanding, were eventually to be turned to another purpose?—I would except from your question, if you will allow me, the "given to understand" and "under an understanding," because that is not the way in which I describe it.

3701. I am sorry if I misrepresent you; I want to get at exactly how it was those additional pipes were laid; I cannot understand that the Electric Light Company would lay down so many additional pipes unless they had a reason for so doing; what was their reason for so doing?—Their reason was to fill their trenches with all the spare pipes they could.

3702. Surely filling spare trenches with extra pipes must have cost them a large amount of money?—Yes.

3703. They must have put them there for some financial result?—No doubt they are a very valuable asset.

*Chairman.*

3704. Were these pipes suited for electric light purposes?—Yes; there are many electric lighting cables now drawn into them.

3705. Were they similar to the tubes that were being laid for the electric light?—Yes, the high tension tubes were all similar; the low tension tubes, for merely house to house distribution, were not similar, and the arc light tubes were similar, but not same size, and the number of tubes between every point was absolutely known to the authorities.

Lord *Stanley.*

3706. The Clerk to the Commissioners in his evidence said this in answer to Question 1987: "Many questions are involved before that consent could have been given, because in the first place the tubes were laid surreptitiously, without the knowledge of the Commissioners at all." Can you explain that?—No; I cannot. The Commissioners' engineers visited the trenches every day; I do not know why that should be called "surreptitiously."

3707. I want to ask you one other question; you spoke about the various exchanges at present being laid out by haphazard; on what system were you going to place your exchanges?—Dividing the City, or dividing the Metropolis into prospective areas and putting an exchange into each as the demand in each area arose, not putting an exchange there (*describing*), and then running out wires a mile or two miles, or wherever may be in the neighbouring areas; I think that is intelligible.

Lord *Stanley*—continued.

3708. Quite so; you would have had eight exchanges which would have comprised, so to speak, the map of London without any regard at first as to whether on each of these there had been an equal amount of demand?—Quite regardless of that. It is the same as in electric light distribution; you must estimate your probable consumption or your probable demand and work up to that. If your estimate is bad, you have spent too much money; if it is good, you have not.

3709. Can you tell me at all what the amount if charged for each exchange would have been?—You mean the subscription?

3710. The subscription.—The figure I have given of 8*l.* being the minimum for the subscriber to one exchange; if he wanted to go beyond he must pay more.

3711. Then suppose an exchange, we will say, took in this side of the river, and there was another exchange on the other side of the river, for that 8*l.* you would only be able to speak in certain area, and on this side of the river?—Yes.

3712. And if you wanted to speak to the other side of the river you would have to pay a toll?—Either a toll or an increased subscription. Might I just add that the whole thing I have partly described is a very complicated thing; at least, it requires very considerable description with the map of London under your eye; it is very detailed, and the way it is done requires an immense amount of detail.

3713. What I want to get at is, whether the subscription is high in proportion to the subscription now charged considering we have the whole of London for the present subscription?—I think I have said just now what I have to say upon that.

Mr. *Benn.*

3714. But for the 28,000 subscribers in connection with your exchanges in the City, your tariff would be 8*l.*?—For each of them.

3715. That would cover 28,000 subscribers in the City?—No, only one of the exchanges; if you wanted to get to the whole City you would pay more.

Sir *Charles Cameron.*

3716. Putting aside the extra subscription and confining yourself simply to the service for the tolls, your limited service and tolls, assuming that to be done, any additional cost involved beyond the initial 8*l.* would depend entirely upon the messages you wanted to send?—Yes.

3717. Exactly, and that service would not be confined to the different districts in London, but would extend over the whole of the United Kingdom all over the trunk lines?—Yes. It is the big question of regional tariff over again.

*Chairman.*

3718. The 8*l.* in the City would enable you to speak to one-eighth of the subscribers within the City?—Yes.

3719. If you wanted to speak to any one of the other seven-eighths, then what would happen?—You come on a fresh classification with a fresh toll, not to each one necessarily; I should propose to classify the subscribers with one increased subscription for all the eight exchanges.

3720. What subscription would your system result in if a subscriber in the City wanted to subscribe to all?—I think it is quite an exceptional thing what the people in the City system ought to pay to be able to communicate with 28,000; if you ask me I could not say what the figure ought to be right off, because it is entirely a question of the value of the service given.

3721. Would it be eight times eight?—Oh, no, nothing like it. I should think if you doubled it for the whole of the City it would be a very fair increase.

3722. £16; that is about the national charge now?—About.

Lord *Stanley.*

3723. That is for the City alone?—That is for the City alone.

3724. Could you tell me at all what idea you had of the rate of charge or toll that you intended to charge?—The Berlin tariff is a very fair one; it varies from 25 pfennige to 50 pfennige per talk of five minutes.

Mr. *Grant Lawson.*

3725. You said 8*l.* in the City, and 100 exchanges in the whole area of London, did you not?—I said that originally the question arose as to laying out London, and that my view was, in 1880, that London would require 100 exchanges. I said that was quite a question of modification. I have also said, I have never designed the whole of London in detail with the whole of the connections for such a system as that.

3726. You think 80 to 100 would be desirable?—I do not think 80 to 100 would eventually be too many.

3727. If a person had to speak to any other person in the City you would double his charge?—That is on the City exchanges.

3728. If he wanted to speak to any of the 80 exchanges in London, paying that would mean 10 times the amount?—No, because London would be divided, besides the City, into six regions.

3729. That we have not heard of?—It would take a long time to describe six regions in each of which there would be a uniform tariff, the City tariff being an exceptional tariff.

3730. Then there would be a great variety of scales, would not there?—There would be some variety, not very great, when you come to work it out.

3731. I just want to ask you a question about the position of these tubes, though I do not think it is really very material; you have, at present, 69,000*l.* worth of tubes?—I have not got them, I am glad to say.

Mr. *Grant Lawson*—continued.

3732. Are not you connected with the City of London Electric Lighting Company?—No, I am no longer engineer to the City of London Electric Lighting Company.

3733. Then I will not trouble you about it; you said the great difficulty about telephoning London was the City?—That is putting the lines underground.

3734. The same difficulty, I suppose, would occur in Glasgow?—Not nearly to the same extent.

Sir *James Fergusson.*

3735. Why not, please?—Because under the surface of the streets of the City there is now no space left; there was very little space when I put the last tubes under; and in Glasgow and all the provincial towns there is much more space. It is not a question of being more costly to lay them underground in London than in Glasgow; it is the want of space.

Mr. *Grant Lawson.*

3736. But you recognise, with your great experience, that there is great difficulty, in a place like the City of London, in arranging a telephone system?—Enormous, I think.

3737. So you are not surprised that there have been some complaints?—Not the least; I only wonder there have not been a great many more.

3738. The National Telephone Company, I think, did not call you in, did they, about laying out London?—No.

3739. The Duke of Marlborough's company did?—He came and consulted me personally, privately entirely; it was a matter of friendly conference. He knew I had gone into it, and he came and asked me my views.

3740. So you naturally would prefer your own system to the one the National Telephone Company adopted?—I do not think they have adopted any system; they have no system.

3741. You prefer the system you laid out to what they are doing?—Yes, I prefer regional rates and regional arrangements.

3742. On the principle of every father preferring his own child?—Yes, exactly.

3743. If there were more exchanges for the message to pass through it would necessarily take more time in passing?—It would; Mr. Preece gave us the time, a minute in each exchange.

3744. There would be more operations?—I think it would take longer than a minute, probably.

3745. There would be more operations or connections, would not there?—Yes.

3746. That would require more labour?—Yes.

3747. Therefore it would be more costly?—Yes, according to the time it was done in; it is only governed by time.

3748. And being more costly I suppose the capital would have to be increased?—Yes.

3749. And there would be more to buy out if they had to be bought out?—I have not gone into the question of buying out.

3750. There would be more material if you had a number of exchanges connected one with another

Mr. *Grant Lawson*—continued.

another?—Of course you have got to consider two conditions, two exchanges alongside one another and two exchanges super-imposed upon one another; and I do not quite realise the result. If you were to buy the two exchanges super-imposed upon one another it would be a costly purchase; I should not like to buy them, I think; or if there was one better than the other I should buy it and not buy the other

3751. I think your calculation about the City of London was for 50,000 subscribers, was it not?—28,000 for the City was the number provided for by those tubes I spoke of, and I roughly calculated, taking the density of the population and the area, that there might be 22,000 within three-quarters of a mile outside the periphery of the City.

3752. Your scheme would be laid out for something like 50,000 subscribers?—Fifty thousand for the four square miles it comes out—four to five square miles.

3753. If you did not get 50,000 subscribers there would be a waste of capital?—Then your capital expenditure, instead of being as low as I have put it, would be so much more per subscriber, but not more in proportion, because you would not draw in the wires, you see; you put in the tubes, but you do not draw the wires in.

3754. It would necessitate an extra charge on the subscriber who did come in?—It would.

3755. You said that having a number of companies on the system of telephones would not cause very much inconvenience to the Post Office in the matter of making up the books of the subscribers?—Yes.

3756. Have you considered the position of the call office; would not a call office have to have each list of subscribers on each telephone company?—A public call office?

3757. A public call office?—I do not think that that is necessary.

3758. Supposing I went into a public call office and wanted to speak to someone in Manchester, the operator would have to find out his number?—I believe you might just as well say you would require a directory for every town in the country before you addressed a letter. You will probably know the number of the subscriber you want to call. When the telephone reaches that position of things, that every subject should be able to speak to every other subject of Her Majesty by telephone, the Post Office will not remember our numbers for us; we shall be bound to remember the number of the subscriber we want to communicate with, just the same as we remember his address.

3759. You take it that a man who goes into this call office must have, somewhere at home, the list of subscribers all over each system?—He must know his friend's telephonic address; that is, his number—his number, say, at Manchester—whatever it may be.

3760. If there were two systems at Manchester he would have to have the two Manchester books?—If the Post Office is required to have at every call office the exchange list of every town in England it does not matter whether they have to have two or one; it is equally complicated.

3761. At present they only need to have the National Telephone Company's books?—You



Mr. *Grant Lawson*—continued.

have only reached 70,000 subscribers at present.

3762. Suppose there were municipal telephones established by 20 or 30 municipalities, you would want the books of those 20 or 30 municipalities, too?—No; the Post Office would be very unwise to keep a library in every call office; if it was necessary they would have to have that, whether there were two companies in one area or one.

3763. If there were two systems, say, in Glasgow, the municipal system and the National Telephone system, the Post Office would have to know which of those systems a subscriber was on before they could communicate with him?—I think not; why should they? The Post Office would simply receive the number that was required to be spoken to, and they would pass that number on.

3764. Yes; but where to?—Will you give me an example?

3765. Say from London to Glasgow?—You go into a call office in London, and you want to speak to your friend in Glasgow.

3766. To my friend in Glasgow, where there is the municipal telephone and the telephone of the National Telephone Company?—I see now your point; you mean that the Post Office would then have to provide two subscribers' lists of Glasgow instead of one.

3767. Yes?—My answer is, that the Post Office should not provide any; you know the address of the people you are writing to in Glasgow, therefore you ought to know the telephonic number, and which system the person you wish to speak to in Glasgow is on. That is perfectly reasonable.

3768. I can get a directory of Glasgow at a club, but I could not get all these telephone addresses?—You may have them in the club just as you have guides of the country.

3769. About the New Company; that was not a benevolent association, was it; it was a perfectly commercial speculation?—As far as I know.

3770. And if it could not have paid on the rates it suggested, I suppose it would have had to raise the rates, or break?—Yes; that is the corollary, is it not?

3771. Yes; there was nothing to stop them from raising their rates, except the agreement with these 1,700 people?—No; there is nothing to stop two people who are competing agreeing not to compete.

3772. You are not here, I understand, on behalf of those 1,700 people, or any of them?—No, nobody.

3773. Their rights under the agreement are protected by law, I suppose, if they have any rights?—Yes. I am one of them, but I have never attempted to go to law about it.

3774. Now just a word about rural telephones, a subject I am interested in; did you in your calculations make any allowance for the difficulty of persuading the agricultural population to adopt a new system; did you allow anything for lectures and technical education, and so on?—No, certainly not, in my estimate.

3775. Not for educating a county council in telephony?—No.

 3776. The

Mr. *Grant Lawson*—continued.

3776. The Post Office, I suppose, having experts at their command, have made some estimate by which they charge for their private wires; it is natural to suppose they would, is it not?—Yes, and it is a very full estimate.

3777 And it is 24,000*l.* a year they would charge?—£24,000 they would charge for that system: yes.

3778. But you think Suffolk could make a profit at 12,000*l.*?—No; 12,000*l.* would pay their expenses.

3779. Twelve thousand and eighty-one pounds, you told us, would be their expenses?—Their expenses.

3780. If they did not get the 12,081*l.*, it would come on the rates?—It would.

3781. A great deal of that money would be initial cost, would it not?—I can go into the detailed estimate.

3782. It is a fact that a great deal of it would have to be laid out at once by the county council?—You mean, having made up their minds to establish a system in the county, the rate at which they would proceed in constructing the system?

3783. Yes?—If I was their adviser in the matter, I should recommend them to lay out the 50,000*l.* and take their chance.

3784. And of its falling on the rates?—No, of its paying its way.

3785. Do you understand how rates are raised in a rural district?—I do.

3786. I know you are an authority on light railways?—I beg your pardon. I do not understand your question, perhaps, about rates.

3787. I was only going to call your attention to the way that rates are raised with the object of showing that if it falls on the rates it falls on the people who do not get the advantage; you have shown us one or two classes who would be benefited, the owners of bulls and stallions, for instance?—Yes.

3788. They are not rated on their bulls and stallions?—No; still, they contribute to the rates eventually.

3789. The village shopkeeper is only rated on the value of his shop?—Yes.

3790. Whereas a farmer is rated on his whole business or his whole holding; so that if there was a loss and it fell on the rates, it would fall more on the farmer than on the village shopkeeper?—Yes.

3791. Do you imagine the ordinary agricultural labourer would use the telephone system?—I do. I know many intelligent agricultural labourers who would use it if they could speak for 2*d.* into the town.

3792. Would you like to get up a private company in Suffolk to run a rural telephone?—That is not in my line.

3793. I should not subscribe, but you do not think it would be a success as a private enterprise?—No, because they would have these extra charges in connection with wayleaves which all private enterprises must encounter.

3794. Then you would authorize the county council to take wires where they liked quite free of charge?—They can do that pretty well where they please except upon private land; and in the case of private land they would be in a better position to get the wayleave than others.

Mr. *Grant Lawson*—continued.

3795. You know the Postmaster General demands a guarantee for any extension of the telegraph service in an agricultural district?—Yes.

3796. I suppose that is because there is a possibility that the telegraph may not pay its expenses in the particular place?—It was the Treasury in the first place who insisted on the guarantee. A large number of rural post offices were connected up at a loss in the early days of the telegraph.

3797. Where they are not paying now, and there is a guarantee, I fancy that if the telephone was introduced they would pay worse in the competition?—I have not been asked any question as to the interference with the existing rural telegraph lines.

3798. Will you tell us what is your idea of what would be the effect; do you think the competition would reduce the telegraph revenue much?—From the rural offices it would, I think.

3799. That loss would fall on the nation?—I propose that it should be compensated for by an eventual toll; an eventual royalty on the licence.

3800. Which should come out of the profits of the county council business, or would diminish those profits?—No. Am I right in assuming that there is a very benevolent intention in legislating about light railways, or that there is a very benevolent intention abroad towards agriculture at the present moment?

3801. That is a question I am afraid I cannot answer for the Government?—I think the loss on these rural telegraph offices would be very small.

3802. You know that the county council are not the road authority, except in a very few cases?—The district councils are the road authority; but I cannot for one moment suppose that they would act at variance with the county council in a matter of that kind, because it would have to be done by the suffrages of the district council; they would not undertake it unless the district council approved.

Mr. *Tully.*

3803. In London at the present time a subscriber has to pay 20*l.* a year subscription, and he is joined to a system which has 6,000 or 8,000 subscribers, I believe?—I understand that it is 15*l.* and 20*l.*; there is one subscription of 15*l.* and another of 20*l.*

3804. And 8,000 subscribers are the total he is connected with?—I believe it is under 7,000; I have the figure here, but I do not recollect it.

3805. You stated that 16*l.* would be your maximum price for any London subscriber who wished to subscribe to all the exchanges?—I did not say that; I was asked the question: If the subscription was 8*l.* to one of the City exchanges, what I would suggest should be the charge to the remaining seven; and I think that doubling the subscription would be reasonable.

3806. That

Mr. *Tully*—continued.

3806. That is 16*l.*?—Yes, I did not say to all London, to all the Metropolis; I said to one region of the Metropolis for 8*l.*

3807. Would you multiply it by eight if they wished to speak to the eight exchanges; speak over the whole system in London?—No, I am having in mind London divided into seven regions: one City region, and six regions external to that, and when I was asked as regards the City, I proposed to double the rate within the City area if you went beyond one exchange.

3808. That doubling the rate would entitle the subscriber to speak over the whole seven exchanges?—Yes.

3809. How many exchanges?—Eight exchanges, I believe; beyond that they would pay by toll.

3810. At present the 16*l.* entitles the subscriber to speak over the whole system to 6,000 or 8,000 subscribers?—Yes. I do not anticipate, with the present 20*l.* which is paid for the commercial use of the telephone, that there is any intention to increase that amount with the number of subscribers that are connected up to the National system. I know of no intention on their part to do that. They will be able to tell you what they propose to charge when they have 20,000 subscribers.

3811. You do not know whether their price would be lower or greater?—I cannot tell you what the alteration will be, or what they propose to do for the 20*l.*, as their number of subscribers to the London system increases. I do not know whether they propose to alter the subscription. I do not recognise that as an increased facility myself; but you will be able to get that better from them.

3812. You are aware that the evidence given by the Post Office experts here is that the country is losing largely every year through the telephone business cutting away the telegraph revenue?—I think I read it in the evidence.

3813. And at present farmers and agricultural labourers have to bear their share of that loss?—So far as it affects Imperial revenue, yes.

3814. Can you tell me up to what year the patents this company got originally last; when did they expire?—I do not like to answer you offhand. There were two patents, the Bell and Edison's patents; the time was either imminent or past in 1890; but you will be able to get that from the officials of the National Telephone Company.

3815. Then it was in 1892 that this agreement was drawn up, that gives them the practical monopoly for the whole country?—At the end of 1892, December 1892, the fusion was practically accomplished between the two companies.

3816. Do you think the Corporation would compete with any chance of success against the company with this large capital of 6,000,000*l.*?—Certainly.

3817. Do you think the Corporation could compete?—Quite.

3818. You do not think that if the company reduced their prices in one area to fight the competing Corporation, they would increase their prices in other areas?—I think it would be very bad policy to do so; they would kill themselves; with 16 years only to live, they would have an earlier death, that is all. You see the patents are out. One of the great things that upheld their competition was the possession of those patents; everybody was afraid.

3819. They had a practical monopoly by getting possession of the patents up to the end of 1890?—That was the crux.

3820. And now they have a practical monopoly for the rest of the term, no opposing licences having been granted to municipalities or county councils?—Yes.

3821. Can you say, has not each subscriber who subscribes at present to the National Telephone Company in his subscription to pay some quota to pay the dividend on this very large capital?—If you will pardon my saying so, you are asking me a question that I cannot answer you from knowledge, because I do not know the state of their accounts. Of course, on the face of it, it is obvious that the subscription must be kept high in order to pay dividend on capital, which has accumulated step by step through all these years up to 5,000,000*l.*, without a corresponding value in plant to repay it or a value in service rendered.

3822. Therefore the Corporation that would not have to pay dividend on capital swollen to that extent could supply naturally at a cheaper rate?—They could supply at cost price.

3823. So that the effect of competition by the Corporation would be to reduce the price to the people in that area?—Either reduce the price or give greater efficiency.

3824. And you think that the only effective competition against this company in local areas would be the competition of either the county council or the Corporation?—I do not know that I should say that the local authority are necessarily the best competitors. I should simply say, competition by whatever body the Postmaster General and the local authority, agreeing together, should say should have it, whether it was done by the local authority or a private company. I do not want to admit that I think that one is better than the other, that is all; I think one can do it just as well as the other.

3825. You think there is not any difficulty in competition in local areas?—No.

3826. No difficulty sufficient to prevent the Postmaster General issuing licences if he thinks it wise?—If he thinks it wise in the interest of the locality, I do not see any difficulty that would follow.

Mr. *Snape.*

3827. In 1884, in the paper you read at the Society of Arts, you said that the telephone service could be supplied at a charge of 8*l.* per subscriber per annum, I think?—Yes, in a London region.

3828. What number of subscribers had you in your mind at that time in expressing that opinion?—I am afraid I cannot recall the paper, but I know I had regional tariffs in my mind, and the number of subscribers within a region was a figure which few people at that time could estimate, because it is the ultimate probable number you have to deal with.

Mr. *Snape*—continued.

3829. So that you limit your region of subscribers to 3,500, which would be one 8*l.*?—I do not know quite whether you are mixing up two things in my evidence.

3830. You suggested a system of 28,000 subscribers divided into 80 exchanges?—That was if it was confined to the City area only.

3831. That would be 3,500 per exchange, or region; I suppose you mean the same thing by those terms?—Yes.

3832. For one of those regions or exchanges you make a charge of 8*l.*?—Yes, one of the exchanges, not one of the regions. The City region I call one region; that would have eight exchanges in it.

3833. In 1884, was it in your mind to limit the 3,500 subscribers in this charge of 8*l.*?—No; my view was not to limit it to a given number of subscribers, because at that time no one could say that 3,500 was too many or too few for an exchange; but it should be limited to the region within which there would be the operations of one exchange.

3834. Have you modified your view since then so as to lead you to say that if you pass a subscriber, or give to a subscriber the right to communicate with other exchanges than his own, you would double the charge?—I only mention the City as a case in which I think it would be fair to double it.

3835. You would not apply it to others?—I do not think it is uniform.

3836. I think you said the total outlay in that region would be something under 15*l.* per subscriber?—Yes.

3837. The capital outlay?—Yes.

3838. Does that include the cost of wayleaves?—The wayleaves would then be reduced to a minimum; in fact it is hard to say that they would be likely to come to anything.

3839. You have not taken that into account?—They are not taken into account, because the whole of the wires for which wayleaves are usually charged would be underground; there would be only what you might call the ends of the wires that would still be overhead. Might I just correct something I said: that was the capital expenditure; of course, wayleave is revenue expenditure; wayleave is chargeable to revenue.

3840. I want to ascertain if you can inform us what would be the charge upon the revenue under these circumstances per subscriber per annum. What would be the cost of working the system after this capital outlay had been made; can you give us any information on that point?—In other words, how much of the 8*l.* and 16*l.* would be earned?

3841. No, not so much how much would be earned as how much it would cost to earn?—I do not like to give you an answer on that.

3842. But that is a very important matter for us?—It is.

3843. On what data, then, have you made the calculation you have given us?—The profits would be a very large percentage on the outlay.

3844. On what data have you arrived at it?—I have not given you any revenue estimate; I have only given you the capital estimate.

Mr. *Snape*—continued.

3845. Let me finish my question. On what data have you arrived at the conclusion that, when you pass from one exchange to the use of the other seven exchanges, the amount should be doubled if you have no cost to guide you; do you not consider the cost before you arrive at such an estimate?—I feel quite sure of this: that that 8*l.* a year being my figure is correct; that is calculated on revenue and on cost; but that if you were to charge double for the whole City region it would not be too little.

3846. But on what data do you base that opinion?—There are a great many corresponding figures in telephone exchanges in other places. One view in estimating a tariff is this: you cannot multiply your tariff actually by the service rendered, except you do it by the toll system.

3847. I am not calling in question that there would be increased cost; I wish to know if I can ascertain it, the means by which you have arrived at the conclusion that that should be the increased charge?—Very well. I was asked the question how much more I should charge beyond that one exchange, and my answer was that I should charge a subscription for the whole City of twice as much.

3848. Without any data?—Without any data before me more than that one is accustomed to deal with in such things.

3849. On what ground do you limit your exchange to 3,500 supplied?—I do not limit it so.

3850. You propose to divide it?—No, I propose to bring in the extra area.

3851. You would have over 6,000 to each exchange?—Over 6,000.

3852. Can you tell us to what limit you think the exchange can safely go without producing confusion?—It is largely a question of the trunks between the boards. I think Mr. Preece's evidence showed you that in Chicago, under their newest arrangement, they can work comfortably between 6,000 and 7,000 subscribers on one board. In speaking of a board, I mean all the block of boards put together within the one room, if you choose to call it so.

3853. I think he said 5,000, if I rightly recollect?—I think he said they were coming up to 6,000; but whether those are in various stories of the same house, or in various houses, or at considerable distances apart, the trunk wires between those are worked under precisely the same condition—the 6,500 is manageable under the one supervision—it is largely a question of supervision.

3854. There is more economy in your view if at one exchange you can have supervision over the whole?—Yes, within limits.

3855. Not in any administrative matter?—No; it is impossible.

3856. How do you propose the tubes should be laid; in what way would you lay them?—Under the footways as much as possible.

3857. In subways?—If subways exist, certainly.

3858. Not in channels, but in subways large enough for them to have access to the wires?—I do not think you should build the subway specially for telegraph and telephone wires, but that

Mr. *Snape*—continued.

that where a subway exists you should put tubes in, or rather suspended cables.

3859. In a large city would it not be an advantage to have large subways in which gas and water and telephones could be had access to, and where it would be easy to repair without taking up the streets?—Not always. There are subways in the City of London so filled with pipes that there is no room to work, and no work could be carried on in them.

3860. How would you deal with the suspended cables and tubes?—I think they would be lead-covered cables suspended at the sides of the subways on shelves; that would be the best way of doing it.

3861. Do you know how many wires one of these pipes will accommodate?—A 2½-inch tube will take 85 pairs.

3862. Are you not aware that in some cases as many as 150 have been put in tubes of larger diameter rather than smaller?—I should not like to do it. I believe a hundred can be put in a 2½ inch tube, but I would rather keep to my figure of 85 for safety. I like a loose cable that can easily be drawn in and out, not a tight one.

3863. You have seen a hundred?—You would have a great deal too tight with 150; you will find a lot of difficult conditions when you come to maintain.

3864. Were the cables you propose high tension or low tension?—We are not speaking of electric lighting, you know. There is no high tension in telephony.

3865. Now, I want to ask you a question about the correspondence which took place about two years ago. The Duke of Marlborough and the other gentlemen who were corresponding with him seemed to anticipate that there was going to be a very great improvement in the telephone system through Manchester with these two companies. Some of them, I think, thought that the time of the telephone millennium was reached?—Yes. We no doubt thought then that the telephone millennium had been attained; but we are as far from it now as then.

3866. Do you think we are any nearer since that time to the telephone millennium?—I have seen no approach to it.

3867. You think there is very great room for improvement in the telephone system still?—I can see in the mind's eye what I call a telephone millennium, but it may be very different to other people's millennium.

3868. The opinion you have expressed to us to-day is that private enterprise is the best method in your judgment of supplying the telephone service?—Private enterprise and competition in default of the State undertaking it. I did say something in reply to one of the earlier questions that I was not quite sure whether the task of what I call the capillaries of the system was not too gigantic a one for even the Post Office to undertake; whether it would not be better to leave that to private enterprise.

3869. Only on that ground you prefer private enterprise?—Yes.

3870. And if that does not exist you prefer the State?—Yes.

3871. Are you of opinion that if the State does not take it over the county councils and



Mr. *Snape*—continued.

rural districts, and the county boroughs and urban districts should take it over, or have the power to take it over?—I think they would be the best agents for the Post Office to have.

3872. And as the agreement is in force between the National Telephone Company and the State until 1911, do you think those powers should be given to the municipalities and the council councils now?—Yes, certainly.

3873. You think they should establish competing systems now?—I think they should have the opportunity and the greatest facility for doing so.

3874. Supposing competing systems were established, have you given any consideration to the method by which, for intercommunication between the subscribers of rival systems, they could avail themselves of either system?—It is easily done; electrically, it is very easily done.

3875. I know, from an engineering point of view?—You mean to say the goodwill of the two competing systems, one towards the other, would get them to agree?

3876. Yes?—I do not think that the Post Office would allow inconvenience to continue.

3877. It is not a question of the Post Office so much as the existing company and new companies?—There would be a struggle, no doubt—one warring against the other; but I think in the end you would find that one set of people with one particular class of work would settle down as subscribers of the one system, and another class of people would settle down as subscribers to the other, and intercommunication would not be so frequent.

3878. Do not you think a reciprocal arrangement would be made which would be to the advantage of each of the companies?—I should hope so; but I thought you rather implied that there would be war.

3879. I asked you whether you yourself had given a thought to the subject?—Yes; as I said before, the new Telephone Company and the National proposed to work in that way; they said so in their prospectus.

3880. And you think that would be possible in other competing companies?—Quite possible.

3881. You referred in a letter to the railway competition having been a benefit, but you would scarcely consider railway competition analogous to competing with the telephonic system. A man has a choice of railways in going from town to town, and it is purely a matter of his convenience which railway he will take, but in the case of the telephone system if he could not get to telephone on the other system he would be in the awkward fix that his own system might not comprise the person with whom he wished to communicate?—Yes, I have not a word to say to that. The analogy is not complete in that way. It was more a general remark that I made as regards competition.

3882. You told us that in Birmingham instead of paying a special toll for communication to a distant place, they pay a larger annual subscription?—I do not think I have referred to Birmingham.

3883. You said "pay a larger subscription." I presume it was a larger annual subscription?—I

Mr. *Snape*—continued.

have not referred to Birmingham; I have not myself mentioned Birmingham to-day.

3884. Then I will not press it?—If you put the question as regards any other place I will answer it if I can.

3885. It is not so much Birmingham as the principle at which I wish to arrive. The Government is taking over the trunk lines?—Yes.

3886. Is it your opinion that the payment for the use of those trunk lines could be effected by the subscriber commuting with the Government for an annual charge instead of having to pay a given charge for each message?—I think that is entirely a matter for Post Office policy. I am quite sure that they will arrange it in the most convenient way to the public.

3887. Then, with reference to the rural telegraphs, by whom would you suggest that that service should be supplied; these call offices?—I think the system I have described would be eminently one for a county council to undertake.

3888. And they would have to take the risk of a profit or loss upon it?—Yes.

3889. And any loss would fall upon the people?—I may say I mentioned a very considerable source of possible profit, and that would be from private persons wishing to connect themselves with exchanges.

3890. You spoke of classifying the subscribers on each of the exchanges. Did you mean classifying by the locality of the exchange or by the business of the subscriber?—By the tariff.

3891. As you are aware, the present arrangement of the National Telephone Company will terminate in 1911?—Yes.

3892. Do you think that for the State to delay taking over the system until that period would be an advantage to the public?—No.

3893. Not even pecuniarily?—Not even pecuniarily; I am sure of it.

3894. Do you think they would have to pay as much at the end of 1911 as they would have now?—All experience tends to show that when the State comes to buy up, no matter what conditions they have attached, they have to pay more than anybody else has to pay.

3895. They are not compelled to buy anything in 1911?—No, but they cannot get out of the fact that they will be connected with a very big system all over the country, and they cannot shut them up in a day.

3896. Even though there was a pecuniary advantage in delaying taking over the system untill 1911, do you think the disadvantage to the public would not be immeasurably greater than any small pecuniary advantage that might be gained by such delay?—The disadvantage to the public in what?

3897. Do you think the disadvantage to the public of delaying taking over the system by the Government until 1911 would not be immeasurably greater than any advantage, supposing there was a small pecuniary advantage to be gained by waiting until then?—I think the disadvantage to the public is increased every day that the State postpones buying up the telephones. Is that an answer to your question?

3898. The sooner therefore they do it the better?—Yes, the better.

Sir *James Fergusson.*

3899. Do you contemplate these telephones on small exchanges in the hands of private companies or municipalities being under the existing law by licence from the Postmaster General?—Oh, yes.

3900. Then what currency do you propose such licences should have?—I do not know sufficient about it to know whether they ought to go beyond 16 years, but if I understand the official papers I have read there is no intention of giving them beyond 16 years from now or granting them more than 16 years from now.

3901. Then in the scheme you have been describing you are contemplating that these licences should only have the same currency as existing ones?—Yes, I calculated my sinking fund for 16 years.

3902. And at the end of that time that the State should have the power of resuming them and taking over the property at its value?—Yes, that is the idea. I do not understand that the Post Office contemplates that it should be compulsory on them in any way: it is entirely optional.

3903. It is the law that in 1911 all the licences fall in, and the Post Office would only have to pay for the plant?—If I understand rightly the Post Office need not buy them all; it is entirely in the option of the Post Office.

3904. It is entirely in the option of the Post Office to buy them, yes?—Therefore, I calculated my figures on a sinking fund of 16 years.

3905. The point I was coming to was this: Do you contemplate that municipalities or private companies would feel themselves safe in expending the necessary capital being at the mercy of the Postmaster General in 1911?—I do not think they would be safe in every case, but I think that they would have to face the necessity of providing a sinking fund for 16 years. We know how the thing would be done; they would receive powers to borrow, and then the inspecting officer who went down to settle the question would say, "You must provide a rate which will replace the capital in 16 years."

3906. Then in the rates that you have contemplated have you made allowances for such a sinking fund?—Which rate are you referring to now?

3907. The rates which you gave the Committee as the probable rates for such exchanges?—You mean the 8*l.* rate.

3908. Yes, the various rates you have described?—In the 8*l.* rate, no; that was made at a time (in 1884) when the whole conditions were different.

3909. But in your evidence to-day you have given us what you contemplate as the probable rates to be charged to the public, have you not?—No; I have given you no estimate more than a figure based on the 8*l.* I gave in 1884.

3910. Then you would not rely on that now?—I think it would have to be modified, but it would all depend on the capital outlay.

3911. But you do not think that any such licensees as you contemplate would be safe without their providing a sinking fund?—No, I think certainly they ought to provide a sinking fund.

3912. There

*Chairman.*

3912. There are just one or two questions I want to ask. I understood you to say that you are in favour of the State taking over the whole of the telephone system, except possibly the rural districts, which you thought might be managed better by a private company?—Yes.

3913. Now, with regard to London you formed an estimate in 1880, and you have seen reason to depart from the plan which you sketched out at that time?—Yes.

3914. That is to say, experience gained since has altered the opinion you then formed?—Yes, as to the number of the exchanges.

3915. You have lessened the number of exchanges?—Yes.

3916. But you have not lessened it to the extent of the National Telephone Company?—No. I do not really know what the National Telephone Company's view as to the future of London is; that is to say, what they think London will ultimately require.

3917. But your plan is wholly different to the plan which the National Telephone Company have adopted for supplying the service in London?—It does not resemble it in a sense. As far as I am aware, they put down their exchanges just as they think they are wanted. I do not know, of course; they may have a very elaborate plan, and they may give you information upon that point.

3918. You divide up London into regions for which you have settled the charges?—Yes.

3919. Do you know of any other town in any other part of the world where they do the same thing?—No, there is no town like London.

3920. But there is no town which has adopted your system?—No.

3921. Therefore you not only differ from the National Telephone Company in the plan which they have adopted, but you differ with the telephone authorities in every other town in the world as to the plan they have adopted in their particular case?—I cannot tell you whether the Americans have laid out New York for the future of New York, or whether Paris has laid it out for the future of Paris to serve really a large proportion of the population. I cannot tell you; I only know that the lines which they have proceeded upon, with the exception of Paris, certainly do not indicate that they look to a very large number of customers. Paris has done so, because the tubes running into the central parts of Paris will eventually provide for 30,000 subscribers; that is a large number.

3922. As I understand, in Paris they have a uniform charge for the whole of Paris?—Yes, there is no regional charge there.

3923. They have adopted that system, I suppose, because they think it meets the needs of the telephone subscribers in Paris?—Yes.

3924. I presume the National Telephone Company, being anxious to satisfy its subscribers, have adopted the system which they believe adapted to meet the needs of telephone subscribers in the City of London?—No doubt.

3925. But you think they are wrong?—I think they are wrong. I think if any other system of distribution had been laid out in the same way without foreseeing the possible demand arising out of supply, they would have come to grief. I look upon the thing as only in its infancy in London.

*Chairman*—continued.

3926. But you are the solitary advocate of that system?—I hope I am not. I do not know of that particular system, but I hope I am not the solitary advocate of regional tariffs.

3927. So far as the Committee have heard, you are; we have had no evidence in that direction?—I am not responsible for the evidence that has been brought before the Committee.

3928. No, that is quite true; then with regard to the question of the considerable difference in your estimate of the cost per mile of laying down a system in London as compared with the estimate given by Mr. Preece; did you take into account the cost of building offices?—The exchange buildings are not included in mine at all. I do not understand that Mr. Preece included the exchanges in his; if he did, of course there is a difference there. That is such a fluctuating figure, it is such a difficult figure to put anything to, that it is intentionally left out.

3929. You did not take into account, I suppose, the trunk wires?—Yes; the trunk wires.

3930. What we call junction wires?—What you call junction wires; that is, perhaps, the better word.

3931. I think you informed the Committee that you served the Post Office for some time under Mr. Preece's predecessor, Mr. Graves?—I was a divisional engineer at the same time as Mr. Preece was one under Mr. Graves.

3932. Did you find the estimates given by the Telegraph Department of the Post Office, as a rule, were so excessive as this estimate appears to have been?—No; they were very close estimates always; we worked to very close estimates.

3933. And largely subject to Mr. Preece, in consultation with other officers of the department?—I always made my own estimates.

3934. The estimates made by Mr. Preece at that time were generally found to be accurate estimates; were they not?—Yes; I do not mean to impugn Mr. Preece's accuracy. I do not understand the lines he has gone upon.

3935. But in the result you make out the sum of 15*l.* to be sufficient for that which Mr. Preece estimates at 55*l.*?—Apparently that is the difference. It is not cleared up, I think, where the difference lies.

3936. But you adhere to your opinion that the 15*l.* would supply the service you have named?—That is if that system in the City that I have described was completed it would have cost that amount

3937. Now, with regard to the agricultural system which you have suggested for rural districts, you do not propose to charge any annual subscription for the use of the system?—No; so much per talk from each call office.

3938. And that there should be no guarantee; you suggest that the county council should start the system without having any guarantee as to the amount of user?—Yes; as to the talks. I think the only thing that could tempt them to do it would be the value of that estimate; that i is a good, sound estimate.

3939. I want to ask one question about this estimate: you propose to charge 2*d.* a conversation?—Yes.

*Chairman*—continued.

3940. This is your letter to "The Times": "To cover this a charge of 2*d.* would be made for each conversation of five minutes within arranged areas, and this must amount to a daily average of takings at each call office of 1*s.* 11*d.*"?—Yes. or 2*s.* a day.

3941. Two shillings a day would be 12*s.* a week, excluding Sundays?—Yes; 309 working days a year.

3942. You calculate 12*s.* being received on the average at each call station would pay the whole cost?—Yes; it is a mere matter of multiplication.

3943. How much do you allow for salary and for taking charge of the call station?—I allow 3*s.* 6*d.* a week for each office as the charge, in the same way that the Post Office pays for their offices. The Post Office uses private houses and private dwellings for their postal business, and pays for the services rendered. Well, I should pay 3*s.* 6*d.* a week to each householder who allowed this telephone call-room to be in his house.

3944. You mean for the service, not of the operator; he could be hardly called an operator?—There would be no operator; a child could watch it.

3945. The person in attendance at the call office?—Yes.

Mr. *Grant Lawson.*

3946. May I ask if there would be a silence-box; would you arrange for a silence-box, or would you expect agriculturists to speak so that everybody could hear them?—I have included the cost of the box into which he could retire, in the capital outlay.

3947. What they call a silence-box?—Yes.

*Chairman.*

3948. And you think you could get the farmers to make use of this sort of communication with all the dangers of their conversation being overheard and prices being quoted?—Well; it is a very fair question to ask me; if it was overheard—that is a defect of all telephonic communication. There are very few of us that are not overheard. I know when I speak in my club I am overheard. I think the overhearing part of the question is not the thing that would frighten the farmers away. If there was a real risk, and if you could not provide a certain amount of protection, there might be something in it.

3949. You do not know of this system, exactly on your lines, having been tried in any country, do you?—The only place I have seen anything like what may be called an agricultural system is in Norway, where farmers club together and form a little exchange for themselves. The distances there are long, and it is an immense advantage to them to have it. The country is cut up by fiords.

3950. That is a country, I suppose, that is not well supplied with telegraphs?—Well, per head of population it is better supplied than this country is even.

3951. The districts you speak of, I suppose, are not thickly populated?—No, they are very sparsely populated, but the telephone is entirely used by that very class of men; for instance, for marketing.

Mr. *Snape.*

3952. Did they find it a case where the supply created the demand?—I should not like to give a positive answer on that; it is one of those things which everybody has had some certain class of experience in.

3953. It is very likely if you give increased facilities that a demand will spring up?—That I am perfectly confident of. A well-worked telephone is a thing that will most distinctly bring demand with it; a badly-worked telephone frightens everybody.

*Chairman.*

3954. There is one question I want to ask about the 1,700 subscribers to the Association for the Protection of Telephone Subscribers: I understand they have not brought any actions upon the agreement that was entered into?—I know of none.

3955. Are you aware whether that is because the National Telephone Company have given them satisfaction with regard to the demands they have made?—I am not aware of that. If individuals have made demands on the National Telephone Company, and got their wants provided, I have not heard of it.

3956. But, at all events, so far as you are aware, no actions have been brought upon the agreement?—No, I should probably have been asked to join if there had been.

3957. And I understand you are generally in favour of competition, not only in London, but elsewhere?—Everywhere.

3958. You think that licences should be granted to municipalities to compete?—Yes.

3959. Notwithstanding, I suppose, that you admit that there would be considerable waste of capital?—Yes, I do not think that matters in the least.

3960. A waste of capital generally means increased charges?—I do not think it always does, in fact, in most commercial undertakings; those people who have spent it wrongly lose their capital, that is all; and if anyone goes in and competes with them and can supply the want for less, they make a fair interest on their money.

3961. Notwithstanding the fact that in the past the competition which has existed has invariably led to one of the competing companies being swallowed up by the other?—Will you allow me to deny that competition has ever existed?

3962. Certainly, I put it to you as a hypothesis?—I say no competition has ever existed, no reasonable competition. Up to 1890 there was no possible competition on account of the patents: and those unsuccessful attempts on the part of various persons (I knew them all more or less) to compete were always miserable failures simply because the patent-owners were too powerful. You may imagine how frightened people were when the New Telephone Company not only received an injunction for the company, but against every individual director, and they all ran out of the room when they got their injunctions; as I say, you may imagine what a fright everybody was in.

3963. Still, it led in each case to the competing company being swallowed up by the larger company?

*Chairman*—continued.

pany ?—Yes, there were a few cases, but you must remember most of the companies mentioned in these lists were brought out under the auspices of the original company ; they were not really in competition.

3964. Do not you think that would happen again ?—Not if you do not grant licences to people with permission to buy one another out. I should make it go on the licence, sir.

3965. Suppose the licence was given, how could you provide against it ?—*De facto*, I should have the licence given subject to the same arrangement as under the Electric Lighting Act. Under the Electric Lighting Act, any company that makes an arrangement with another electric lighting company loses its order under the terms of Provisional Order.

3966. I am assuming that a licence is granted say in a town like Glasgow to another company, how could you prevent the National Telephone Company from buying up that company, the National Telephone Company being under no possible restriction, because their licence is unhampered by any arrangement of that kind ?—You could not prevent that, of course.

3967. Therefore do not you think it probable that competition would still mean the same process that has been going on ?—It might probably under the unfortunate agreement, which I am not supposed to allude to with the National, if they had the power to buy up.

3968. That does not result from the agreement ?—Do not you think the agreement could make it prohibitive for them to buy up anybody ?

3969. Do not you think that the result of competition would be that the same process of buying up would go on in the future as that which has gone on in the past ?—Yes ; but I think something might be devised to prevent it.

Mr. *Snape.*

3970. Do you think that could happen if licences were granted to municipalities ?—No ; but I think the Postmaster General was referring to companies.

*Chairman.*

3971. Yes ; I was referring to companies ?—I think it might be carried out by strict rules on the part of the Post Office, because if those people established a system it would be a system alongside the other, and I think it would be easy for the Post Office by rules to make it not worth while for the National to buy them out. If the Postmaster General put his mind to it and said that he would not allow that thing to happen, then I think it would be a very difficult thing to happen, because, of course, people like myself assume that you are going to lay down rules under which all this is going to be done.

3972. I do not think you must assume that we are going to take any course of that sort ?—I only put it in that way as my idea.

Sir *Charles Cameron.*

3973. About the buying up the competition, you have already said that it would be the easiest thing possible to make an arrangement with the Corporation, or to require the Corporation of Glasgow to give any amount of security that it would not be brought up ?—No.

Sir *Charles Cameron*—continued.

3974. You think that is easy. Now, to make clear your proposition about charges, you say that for the City you would propose having a subscription to one exchange of 8*l.* ?—Yes.

3975. And you would allow the person who got access to the exchange for the 8*l.* subscription to pay toll charges which would take him anywhere ?—Yes, I said an increased tariff.

3976. To pay an increased tariff for the whole range of the eight exchanges ; do you think it might easily be done for a double charge, namely, 16*l.* ?—Yes.

3977. That is about what the Telephone Company at present charges, is it ; or is it less ?—Less.

3978. Roughly speaking, what you propose to do would be to give a full service like the Telephone Company at the present moment supply at a rate not exceeding that of the Telephone Company ?—Yes.

3979. That service would be on an improved system—universal twin-wires and the most improved instruments ?—Yes.

3980. And in addition to that you would give everyone who wanted the minor service and access to the telephone system at a cheap rate that minor service at that cheap rate ?—Yes, or a local service.

3981. The cheap rate would be in the City, 8*l.*, and less outside the City ?—Yes.

3982. And as to the question Mr. Snape asked you as to the adequacy of the double charge to cover the increased cost or the difference of cost between access to one exchange and access to the whole eight, you have had experience, possibly, of trunk-line subscriptions, have you ?—I should not like to say I have taken the trouble to work out any calculation in connection with the usual trunk-line operation.

3983. No, that is true ; but may I ask you have you had any experience of a local service and trunk-line charges, you yourself ?—No, not in a sense.

3984. Then would it surprise you to learn that I, who am on an exchange at Greenock, a very small exchange, for which I pay 10*l.* a year, and a subscription for trunk lines, that my trunk-line service does not cost me 3*l.* a year, although most part of my telephoning is done to other parts of Scotland than the local exchange ?—Not at all. I think that is very much the proportion between the local use and the external use of a telephone system that most people one meets with require, London always excepted, and London is the great difficulty.

3985. Are you aware of the fact that in many offices in the City there is not merely one telephone, but a great number of telephones ?—Yes. That is a very reasonable way of getting over the difficulty of time. Mr. Preece described there being several telephone connections with one office to one exchange as a means of saving time.

3986. And that he mentioned as being very common in America ?—It is only another way of varying the tariff.

Sir *Charles Cameron*—continued.

3987. But as a matter of fact it exists in London?—As I say, it is only another way of varying the tariff.

*Chairman.*

3988. I am not sure whether you stated this: Is it your opinion that for the service given in London over the large area, and with the right to communicate with every subscriber, the charge of 17*l.* 10*s.* for the City, and 12*l.* or 10*l.* outside the City, is not an unreasonable charge, not an excessive charge?—I said that; but may I say that I attach conditions to it?

3989. Certainly?—That would be if London was telephoned in the way in which I think it ought to be telephoned, then I think it would be a very moderate charge. I will go so far as to say that; but London I do not regard as being telephoned at all well or adequately; I think it is a large charge to have to pay for what you really do not want; a large number of people do not want to communicate over 630 square miles. It is difficult to answer your question, if you understand me, except conditionally. I do not think the service is a good one; it may be dear at any price, do not you see?

*Chairman*—continued.

3990. Still you think for the facilities given, apart from the system of wires and the system of telephones, the charge is not an excessive charge?—It probably is not.

3991. I suppose you would say the same with regard to the 10*l.* rate in the larger towns throughout the United Kingdom?—Probably; but I cannot tell you unless you give me town by town.

Mr. *Tully.*

3992. Is it an excessive charge for an inefficient system?—It is an excessive charge for an inefficient system. It all depends upon the efficiency of the service rendered.

Mr. *Snape.*

3993. Then it has no relation to the cost of supplying the service, but you think the more efficient the service the larger the charge without reference to its cost?—Efficient, including area and time.

3994. Without reference to the cost?—I think the cost should be graduated according to what you get.

*Tuesday*, 21*st May* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Captain Bagot. | Sir John Gorst. |
| Mr. Baird. | Mr. Grant Lawson. |
| Mr. Benn. | Mr. Arnold Morley. |
| Sir Charles Cameron. | Mr. Snape. |
| Mr. John Ellis. | Lord Stanley. |
| Sir James Fergusson. | Mr. Tully. |

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

The Honourable J. G. WARD, M.H.R., called in; and Examined.

*Chairman.*

3995. I BELIEVE you are the Postmaster General of New Zealand?—Yes.

3996. And Treasurer, I believe, of the Government of New Zealand?—And Treasurer.

3997. And a Member of the House of Representatives?—Yes.

3998. How long have you been Postmaster General?—About five years.

3999. But previous to that you had been, I believe, in the Post Office Department?—Yes; I graduated in the Post and Telegraph Departments both. I retired from the Post and Telegraph Departments rather over 20 years ago.

4000. During the five years you have been Postmaster General you have had practical experience of the working of the telephone in New Zealand?—I have; I have had the control of both Departments.

4001. And I believe in New Zealand both the telegraphs and telephones are in the hands of the State?—Yes; we legislated, in the first instance, to prevent anyone else introducing a complete telephone system. No one but the State can enter into that business there.

4002. Either telegraphic or telephonic?—Either telegraphic or telephonic.

4003. Was that so from the time the telephone was first introduced into New Zealand?—Yes.

4004. So that there has been no competition in any sense?—No competition in any sense; it is a State monopoly absolutely.

4005. Can you give us any figures as to the development of the telephone in New Zealand?—Yes; it has worked very successfully, I may say, and the development, for a sparsely-populated country, has been very marked. At the starting of the system we had in the whole colony only 116 subscribers; now we have got approaching 5,000; that is within a period of 12 years.

4006. Is that urban as well as rural?—Urban as well as rural.

4007. You say about 5,000 subscribers; what number of population would that mean per subscriber?—It is about $\frac{1}{120}$th, I should think, thereabouts; a little mor perhaps.

Mr. *Benn.*

4008. One in 120?—That is it, approximately.

*Chairman.*

4009. What proportion of those subscribers would be urban, as compared with rural?—Oh, I should think four-fifths of them would be urban.

4010. And would those four-fifths be mainly in the larger towns?—Our system extends very widely from one end of the country to the other; small towns and large towns also. In the larger exchanges the system really is a very connected one. The system is to have the larger exchanges connected with the outlying smaller ones, and that is so nearly all over the country.

4011. Connected by trunk-wires?—Connected by trunk wires. Those trunk-wires are in some parts used for either telegraphic or telephonic purposes. We have got a system of converting a telephone instrument into a Morse instrument in the case where the trunk-wires are used, and they are duplicated in that way over a single wire, and we change from one system to the other as the necessities of the public require.

4012. You are now speaking of the trunk-wires?—Yes.

4013. That is to say, you use your trunk-wires either for telephonic purposes or for telegraphic purposes, according to the demand of the service?—That is between smaller exchanges and larger exchanges.

4014. For telephonic purposes are they twin-wires; metallic circuits?—No; we have not the metallic circuits at all.

4015. Neither with regard to the trunk service nor with regard to the local wires?—With one or two exceptions they are single wires everywhere.

4016. What prices do you charge in the various

*Chairman*—continued.

various districts?—We charge a subscription of 5*l.* per annum, with an entrance fee of 1*l.* in the first instance, for business purposes, within half a mile of an exchange; and for private houses within a mile of an exchange; after that 1*l.* a mile until a distance of two miles (I think it is) is reached; then if a new line of poles is erected we charge 2*l.* 10*s.* per mile extra.

4017. And do those charges apply universally over the country?—Universally; and if anyone requires an instrument beyond a distance of two miles, they have to enter into a guarantee to keep the instrument for five years.

4018. That is to say, to continue subscribing for five years?—To continue subscribing for five years. That is, of course, the result of a very low charge we make. We will not put up a costly wire unless we have a guarantee that the instrument is to be held for five years.

4019. You make no reduction in your charge upon a guarantee of five years?—No reduction whatever.

4020. And you refuse to put up long-distance wires to subscribers unless they give you a guarantee for five years?—That is so.

4021. How many exchanges have you?—Well, I can scarcely tell you that at the moment; but we have a great number.

4022. Perhaps you can tell us the number for the principal towns?—We have them at Auckland, Dunedin, Christchurch, Wellington, Oamaru, Tamaru, and Invercargil, and other towns.

4023. I mean the number of exchanges in each town?—Oh, in each town. Well, we have one central exchange in each town, and those exchanges communicate with bureaux at points all over the town.

4024. To separate exchanges?—To independent centres all over the towns; bureaux, practically, they are.

4025. Do you mean what we call "call offices"?—Yes, I presume you call them call offices.

4026. They are not offices to which the subscribers' wires are led in?—Yes; the subscribers get on to those offices whenever they wish, of course.

4027. Do you mean that each of those towns you have mentioned has only one exchange?—Only one exchange; one central exchange.

4028. These are bureaux or call offices to which the public can go and speak to other subscribers, where the subscribers who have them may be in the town?—Yes, quite so.

4029. Can you give us any information as to the financial results of the telephone system so far as the Government is concerned?—Yes; the total cost of the system at the end of the last financial year (that is the financial year previous to the 31st March last, which I have not got, of course) was 104,500*l.*, and the total earnings of the system during the same period were 183,800*l.*; our earnings exceeded the cost by some 83,000*l.* We have provided all along for depreciation to the extent of 10 per cent. per annum over our lines, and we have contributed 62,000*l.* towards the depreciation of the lines, and after the whole of the working expenses are paid, the net earnings of the telephone exchanges at the date I name were 54,082*l.*

*Chairman*—continued.

4030. For that year?—The total net earnings.

4031. For that financial year?—No; right up to that period, covering the whole period up to that date.

4032. But did not you say that the balance of net earnings over expenditure was something like 183,000*l.* in that one year?—No; up to the 31st March, the financial year that these returns are made up to, that was not March last, but the March preceding that.

4033. Eighteen hundred and ninety-four?—Yes; the cost of telephone exchanges up to that date, that is, from the very inception of the system, was 104,500*l.*, and the revenue up to that date was 183,800*l.*

4034. The net revenue?—The net amount we have contributed from the telephone service to the Consolidated Fund of the colony is 54,082*l.*; that is the balance over cost, including depreciation and everything else.

4035. Of course you charge the cost of staff and plant; do you charge the cost or the rent of buildings?—We charge the cost of everything that is absolutely incurred, everything, rental and buildings. If we paid rental for a telephone exchange in a country place that would be charged. As a rule we do not pay rental.

4036. The buildings belong to the Government, and therefore there is nothing charged as against the telephone?—Generally the buildings belong to the Government, except in the cases of Government sub-post offices, where the telephonists would be paid under the system that we have half the fees received. That would entail upon them the providing of telephone offices free and everything else incurred.

4037. What would be charged as cost against the telephone?—Well, the gross earnings would be taken, and the balance that is payable to the officer in charge of the Telephone Department would be debited as the cost of working that particular branch. That would cover rent and everything else.

4038. In the larger towns I understand the buildings belong to the Government?—Entirely.

4039. And therefore no rent is charged against the telephone in these cases?—No, that is so.

4040. Have you gained any experience with regard to the question of centralisation or subdivision of exchanges?—Yes; even with our small system (a system which is comparatively small compared to that of a country such as this is) we are opposed to a large centralisation system in towns. In the case of Wellington, where there has been a considerable number of subscribers during the last year or two, we propose shortly to build an independent exchange a mile and a half distant from the existing one, to get it on a trunk wire rather than to have one very large central exchange. We do that really for the purpose of ensuring speed.

4041. But a subscriber on the two exchanges would be a subscriber to the same system?—Absolutely.

4042. And

*Chairman*—continued.

4042. And would have the right of speaking to all parts of the area?—Yes.

4043. At the same rate?—Yes; our subscription is a low one, and, I think, it is only right I should say that the average cost of each of our connections is not at all high; the average cost in 1894, including long and short wires, was 24*l.* 12*s.* 1*d.* per connection.

4044. That includes what; does it include the connecting wire?—It includes the cost of construction, the cost of all expenditure incurred in making the connection.

4045. And including the instruments?—Yes, it includes the cost of the instrument; it is the capital cost for instrument, wires, poles, labour, freight, superintendence. The average is 24*l.* 12*s.* 1*d.* per instrument.

4046. Your largest towns, of course, do not compare with the large towns of this country; I think the population of your largest town is only 70,000?—Yes, we do not compare in size with your towns at all. We have only one town of which the population is about 70,000; our population at the different centres is comparatively small.

4047. Therefore you do not suggest that the experience gained in towns of that magnitude has much bearing upon the question of telephoning London or large towns in this country?—No, your circumstances are so different, of course, that they require to be specially treated, I should say.

Sir *James Fergusson.*

4048. The construction of your post office and telegraph buildings is not paid for out of current revenue, is it; you do it on loan?—Not altogether; originally, of course, when the public buildings of the colony were a necessity to meet the pace of the settlement that was going on in different parts it was entirely debited to the public works fund. In later years a proportion of the revenue of the Department was, and is used for that purpose; for repairs very frequently.

4049. At present you say that new works are partly paid for out of revenue?—Partly, yes.

4050. About what proportion?—Well, our total public works expenditure last year would be, I suppose, under 450,000*l.* Out of that we paid 250,000*l.* of our revenue into the public works fund to assist to make up that expenditure.

4051. I only want to ask you about new works, not about general public works expenditure, and again I only want to ask you about post office work?—Yes, they come out of that fund that I speak of.

4052. Perhaps in equal moieties out of capital and out of revenue?—Yes; rather more out of revenue than out of capital at present.

4053. We may take it that whether it be buildings or whether it be lines rather more comes out of revenue than out of capital?—Yes, that is so.

4054. And after paying 10 per cent. to depreciation, and paying interest on capital you have that surplus that you have stated, is that so?—No. What I should have said is that the 10 per cent. includes 5 per cent. interest and 5 per cent. depreciation. We call it 10 per cent. depreciation. I called it 10 per cent. depreciation. We provide 5 per cent. interest on the capital cost and 5 per cent. for depreciation; that makes up the 10 per cent.

Sir *James Fergusson*—continued.

4055. Now, can you say what is the greatest number of subscribers that you have in any exchange?—The greatest number on the 31st March 1894 at one exchange was 872.

4056. Is that at Auckland?—No, that is at Wellington. Now I think it is, at the moment, about 1,200, but I am not sure about that.

4057. Then how many exchanges are there in the colony?—Well, of what you would call central exchanges here, there were 25 in the colony at the date I name.

4058. And 5,000 being the gross number of subscribers, that would give you an average of 200 for each?—Yes, about. That average really, as a matter of fact, would not be 200, because, as I say, we are a very scattered community in New Zealand, and there are a great number of places outside those exchanges I have named where there are telephone exchanges not included in these lists at all. There are scores of small places. Practically our telephone service in the smaller parts of the country we look upon as an auxiliary to the telegraph service.

4059. I saw that the other day, and I admire it so far; then may I ask you what is the longest line of trunk wire by which you telephone?—The longest line used by subscribers at an exchange, I should say, is about a hundred miles, but we speak distances of 150 and 180 miles over an iron wire.

4060. With only the earth connection?—With only the earth connection, yes.

4061. And do you consider that your telephone is generally efficient, and the sound clear?—It is a very efficient service; but a single wire system of course is not as good as a metallic circuit; you cannot get over the troubles of induction under a single wire system: but our system works excellently, we have very few complaints, very few indeed.

4062. What weight of wire do you use on trunks and exchanges respectively?—I cannot tell you that.

4063. You do not know?—No, I cannot tell you that; I have not that information with me.

Mr. *Benn.*

4064. The rate which you charge you told us was 5*l.* in addition to the initial pound, the subscription is 5*l.*?—The subscription is 5*l.*

4065. That is based upon the system, if I understand you rightly, of charging a low rate for a local and limited service, and an additional charge for those who want the advantage of a lengthened service?—Yes, after a certain mileage we increase in proportion to the length of line; it becomes a more costly service of course.

4066. Do you find that that adjustment of charges largely benefits those who only require a limited service?—The low charges?

4067. Yes?—Oh, decidedly so.

4068. Could you give the Committee any information as to the proportion of messages that come within your 5*l.* subscription?—No, I could not give you the proportion, but any one who

Mr. *Benn*—continued.

who happens to go to New Zealand will find that in all towns in the colony the telephone is not only a part and parcel of the establishment, but it is used continuously day and night.

4069. The matter is important, because of course you are aware that in this country we have one tariff for long and short service, so that the subscriber who only requires a limited service has, in the judgment of some of us, to bear the burden of those who require a more lengthened service; what I want to get at is this, whether your low tariff is not a great convenience, and a great saving to those who only require a limited service?—It is distinctly so. Before we decided to have the tariff as low as we have it now, we had a very very meagre subscription list compared with what it is now. It is not large now, as a matter of fact, over the whole colony, but previously it was very small. We made a reduction after I became Postmaster General. We reduced our subscriptions by practically half or very nearly half; we came down from an average of 9*l.* to 5*l.*, the result of that reduction being that we have made up more than the previous revenue that we had, and that has chiefly been got from people within the limited area.

4070. People within the limited area?—Within a distance of half-mile, or a mile, and two miles.

4071. So that if a proposal were made to alter your system or your charge from 5*l.*, say to 10*l.*, which should cover all the distances within your system, you would consider that an undesirable thing?—Well I do not profess to judge as to England. Of course, I can only speak about one's own country. I am quite certain many of our subscribers would go off if we did that.

4072. What applies in that respect to New Zealand would probably apply to this country?—Probably.

*Chairman.*

4073. I do not understand that there is a limited area over which your subscribers have the right of telephoning for a low rate; it is a length of line between the subscriber's house and the exchange, is it not, which reduces it to 5*l.*?—The subscription is 5*l.* within a mile from the exchange for private houses, and within half-a-mile for business purposes. Then there is a pound per mile charged to private people for every mile, or portion of a mile, and to business people for every mile beyond a half-mile.

4074. That is to say, some subscribers pay 5*l.*, some 6*l.*, and some 7*l.*, but all the subscribers have the right to speak over the same area?—They speak without any extra charge to telephone subscribers in the first instance, on the ordinary telephone exchange. Unless it is over a trunk wire, between two exchanges, that covers the whole cost. Some private subscribers may pay up to 30*l.* As a matter of fact, some do pay up to 30*l.*

4075. Where the distance between their instrument and the exchange is a very long distance?—Where it is a very long distance, yes.

4076. But the difference in price charged to different subscribers merely depends upon the length of wire between the exchange and the subscriber's house?—Entirely so.

*Chairman*—continued.

4077. It is not the limited area over which they have the right to speak?—No.

Mr. *Benn.*

4078. In referring to it as a limited area, I had in my mind, of course, the limited length of wire; that was my meaning, for the moment, in describing it as a limited area. My point is this: whether, in your judgment, a subscription covering the whole of your wires, irrespective of those distances, a subscription of double that which now obtains would be advantageous to your system in New Zealand, or otherwise?—You ask my personal opinion; I should say distinctly it would be disadvantageous.

4079. Then your evidence goes to show that it is better to have a low charge for the use of a limited length of wire for those who only require a limited use than to have a general charge which covers the whole of the system?—Yes; with a view to making up our gross revenue, I lay it down as a necessity (in our country at any rate, and you must form your own judgment and conclusions so far as this country is concerned) that for us to get our aggregate revenue we must have the low charge within a mile or two miles of the main exchange. By doing that we get a large number of subscribers; and those who go beyond that, by paying an extra subscription, practically assist to pay the cost of the extra length of wire and they do not pull down our general results.

4080. I think you said the population of your largest city was some 70,000?—Yes; about 70,000 I think it is.

4081. Can you give any information as to the proportion of messages in a town of that kind which would come within the 5*l.* tariff, and those which would come outside that?—Well, I should say that there are four-fifths of them within the moderate tariff.

4082. Four-fifths?—I should say so.

4083. So that if the subscription were doubled for the convenience of going over the whole of the system, four-fifths of the population would be punished to the extent of 5*l.* per subscriber?—Whatever the extra amount you put upon those four-fifths, of course would be favourable to those who had the long wires; and of course the four-fifths would not like it; that is a certainty.

4084. On the question of centralization, you said, I think, that your experience tended against centralization, even in a town of 70,000; what is your experience in such a case as that?—In New Zealand our system of telephonic communication, both between business houses and private houses is very rapid. They are small exchanges, of course, but the attention is just about as instantaneous as human beings can put you through. We want to maintain speed, which we look upon as very important; and rather than have a swollen exchange with an excessive number of subscribers, we would prefer to have two exchanges, with 1,500 or 2,000 subscribers each, at convenient points. We think that is better than

to

Mr. *Benn*—continued.

to have 4,000 or 5,000 instruments crammed into one exchange.

4085. Then does your experience go to show that a sub-division of exchanges really tends to speed?—Yes, it does, distinctly.

Sir *Charles Cameron.*

4086. There is just one point I think you did not mention; in addition to the subscription rate, you did not say anything about trunk rates?—The trunk rates to non-subscribers to the telephone service, if they want to use the service, they pay 6*d.* for three minutes within a distance of six miles; that is, non-subscribers to the telephone service.

*Chairman.*

4087. Are you speaking of the trunk wires?—Yes, the charges over the trunk wires; and if it is over six miles they pay 1*s.* for six minutes. Subscribers pay 6*d.* for six minutes. They pay a subscription of 6*d.* for six minutes at either end, and they are switched through more than one exchange for that charge.

Sir *Charles Cameron.*

4088. In fact, it is 6*d.* for six minutes anywhere?—Practically; we tried the system not very long ago of charging 6*d.* for six minutes to a certain distance, and then 6*d.* for a further distance. As a matter of fact, in practice it was very unsatisfactory, and not long before I left the colony it was abolished.

4089. So that now it is 6*d.* a subscriber for six minutes anywhere?—Yes.

4090. I understand that that long distance telephony is very much availed of?—Yes, it is used considerably.

4091. I understand you have introduced luxuries in the way of telephony which are not known in this country. You do not have to go to the instrument yourself, for instance?—In New Zealand, in addition to the subscription of 5*l.* per annum, anyone is entitled to as many extra instruments as they like for an additional charge of 1*l.* per instrument per annum. That means that you can, in addition to having your telephone in your public office, have a telephone in your private room anywhere, either in your house or your business establishment; you can have it on your table and get switched through off the main instrument. That costs you 1*l.* a year extra. I have myself at my own house an instrument which can be taken 400 yards away from my house if I like. It is frequently taken 100 yards and 150 yards out into the garden, and you can speak just as easily there as you can from the telephone elsewhere.

4092. That does not mean that you can have an instrument in your office at the usual rate and an instrument in your private house, too, for the same subscription?—No, it is two independent instruments. You can have an instrument in your office, for which you pay the 5*l.* a year, and you can have an extra telephone at your office for an extra 1*l.* a year, and at your house one telephone for 5*l.* per year, and an extra one for 1*l.* per year; and upon the score of convenience we give people flexible wires that they can coil up if they wish for the extra telephone; to suit their own convenience they can take it any distance they like from their ordinary fixed instrument.

Sir *Charles Cameron*—continued.

4093. You mention that you do a lot of this long distance telephony upon a single iron wire?—We do.

4094. Is the result clear talking?—It is very clear; but an objection to an iron wire, of course, is that there is a limit to the distance over which you can speak. As a matter of fact, in the colony we are now not importing any iron wire; we have stopped it. We are importing nothing but copper wire for telephone purposes.

4095. What instrument do you use?—The Blake transmitter right through the service; upon the principle that we do not believe in having different classes of instruments; we stick to one class entirely.

4096. You find the Blake telephone satisfactory?—It is very satisfactory.

4097. I understand the habit of telephoning is so much ingrained in your habits that you telephone frequently when you are in other countries?—Yes, as a rule I do.

4098. Have you telephoned frequently in London?—Not frequently.

4099. What has been your experience of telephoning in London, as compared with New Zealand?—The delay is the trouble. It is a large place, of course, and the delay is the only reason that I can give you for its being unsatisfactory in London. I rung up this morning, for instance; the Telephone Exchange did its best to put me through; but the line they wanted to put me on was engaged. That does happen sometimes. The result is you have to wait for a considerable time. That is, I presume, owing to the excessive population you have here.

4100. Do you think the instruments in use by the National Company are as good as yours, as clear-speaking?—The instrument I have spoken on is a very good one indeed. I have only used the one instrument since I have been here.

4101. The number of subscribers at Wellington, I think you told us, at the date of the Return you had in your hand, was 872?—Yes.

4102. You say it has since gone up to 1,200?—Yes; considerably beyond 1,000. I think it is 1,200.

4103. It is considerably beyond 1,000; and the population of Wellington is 70,000, I think you said?—The population of Wellington is about (I think, speaking from memory) between 40,000 and 50,000. Auckland is the heaviest populated place in the country at present.

4104. About 45,000, we will say; and there are over 1,000 telephone users; that will give 1 in 45?—Yes, about that.

4105. Could you give us any figures about Auckland?—At Auckland, at the date I named, there were 730 subscribers, but I am not quite sure of the population; I am speaking entirely from memory. I think the population of Auckland and its suburbs, where the whole system works, is, roughly, about 70,000, but I am not sure of that.

4106. That would give you one subscriber to less than a hundredth of the population?—Yes.

4107. The people generally in proportion to the

Sir *Charles Cameron*—continued.

the population, use the telephone service very freely?—They use the telephone service very freely indeed, and its use is growing very rapidly, of course, everywhere.

4108. What arrangements have you for utilising the telephone in connection with the post; for instance, if a man in Auckland wishes to communicate with someone who is out in the country, over 100 miles off, and a telephone wire runs to within, we will say, 10 miles of this man's house, can he utilise it?—Yes, we utilise it in every possible way. Our telephones from the smaller places to the larger ones are left through always at night-time for the purpose of getting doctors or anybody who may be wanted.

4109. Supposing a subscriber in Auckland or Wellington wished to speak to a man five miles distant from the end of a long-distance telephone wire, have you any arrangement with the Post Office whereby an express messenger or an ordinary postal messenger should take the written message?—Yes; the written message is taken out and charged exactly as if it were a telegram.

4110. Will you please explain to us how you collect the sixpences from the subscriber?—The sixpence is collected from the person who communicates in the first instance, if there is a person there to communicate with; if there is not then it must be collected from the addressee.

4111. You have not introduced any such system as exists here with the National Telephone Company, having a deposit against which all trunk-line charges shall be debited?—No, we have not done that, but I should say it is a very good system, very convenient.

4112. It is a very good system; it must save a good deal of trouble in collecting?—Yes. We have not done that, chiefly because we are a small community, and we find we can collect all our revenue in the ordinary course, without having any debits at all.

4113. You mentioned certain subscribers who pay 30*l.*, 40*l.*, and up to 80*l.*; but there are people who are practically supplied with a private wire on to the exchange?—Yes. At one time our system was that the whole cost of the private wire had to be paid for by the people who wanted it. Some people paid as much as 1,500*l.* initial cost of a private wire; but that system has been abolished entirely; it did not work very satisfactorily, and now it is entirely a subscription system.

4114. Will you take a telephone (say) 25 miles up country on a guarantee that a fixed subscription shall be paid for five years?—Yes; we do this: in addition to the guarantee of the subscriber, no matter how reputable he may be, or in whatever position he may be, in addition to that we compel him to have two securities; that is done for the obvious reason that a man who wanted a long telephone wire, unless he were able to get two good sureties, could not get it in the first instance, and no two sureties would come in unless the man was in a sufficient position to keep the wire going five years. That is quite general; it is quite one of our bye-laws and regulations, and it applies to everywhere.

4115. You could not make any exception?—

Sir *Charles Cameron*—continued.

We could not make any exception; we treat everybody alike; absolutely so.

4116. You say you legislate so as to secure for yourselves the monopoly of the telephones from the very first; was there any reward or recognition to the inventor of the telephone?—No, nothing whatever; of course, we legislated before telephones were established in our colony.

4117. In other Australian colonies they have even a better service than you, have they not; a service with double wires?—In Sydney the service is better; it is better entirely in that one way, that it is a metallic circuit.

4118. I suppose you cannot give the Committee, from personal knowledge, any details of it?—No, beyond the fact that the Sydney one is the most perfect working exchange I have ever seen.

4119. Do you know what the number of subscribers is?—No, I do not.

4120. You said, as I understood, that the average total capital charge per subscriber in New Zealand was 24*l.* 12*s.* 1*d.*, including instruments?—That is so.

4121. And including long lines with short?—That is so; that is, over our whole service.

*Chairman.*

4122. I just want to ask you one or two questions; have you any difficulties with regard to what we call wayleaves; that is to say, the right to put telephone wires under or over the streets in towns?—No, we have no difficulty whatever in that respect; we have provided for it; it is provided for in our legislation; we go anywhere and everywhere.

4123. So that charges of that kind, which have to be met in this country, do not apply to New Zealand?—No, not at all.

4124. You have no difficulty of that sort?—No; our ways are clear everywhere without any cost whatever.

4125. You say the system is one of uniform charge for the local services apart from the trunk wires?—Yes.

4126. I just want to clear up that point that Mr. Benn was examining you about; I think there was a little misapprehension. As I understand, there is no limited service for a certain class of subscriber as compared with other subscribers; every subscriber in a locality has the right to speak to exactly the same number of subscribers as every other subscriber?—Yes, they have the free right to communicate anywhere they like.

4127. Is the difference in charge wholly due to the expense incurred by the State in connecting the subscriber's house with the exchange; and is that expense regulated by the distance, which may be longer or shorter, from the exchange?—It is entirely regulated by the length of his wire to and from the exchange.

4128. It is the increased cost to the State of connecting his house with the exchange that regulates it?—We say, whatever the cost may be, over half-a-mile for business purposes, or over a mile for private houses, that the user must pay the additional cost, so as to keep the average of the whole department up.

4129. You

*Chairman*—continued.

4129. You said that the general average number of subscribers, in your opinion, to a particular exchange, ought not to exceed, roughly speaking, 2,000. I understand you have not tried the multiple board system?—We have tried it, and even under that system we would limit it in our colony. We propose to establish the multiple system in the larger centres; but even under that system we would limit the number. We prefer not to have an excessive number. Greater speed is what we aim at, and to have the trunk wire between the exchanges rather than the concentration of a very large number of people on one exchange.

4130. You recognise, do you not, that dividing your subscribers between separate exchanges, the number of subscribers you have described, means delay in getting over the junction wires on to the exchange?—It means an extra connection whenever you use the connection between two exchanges; that is so. Our experts in the colony, who have had life-long experiences at the business, believe in that system, and I think they are right myself.

*Chairman*—continued.

4131. You believe in the principle of subdivision?—Yes.

Mr. *Grant Lawson.*

4132. Does your right of wayleaves, carrying your lines as you like, extend to putting poles on people's houses?—No; we cannot put poles on people's houses.

4133. You cannot?—No; we do not put them on people's houses anywhere.

4134. Is it all underground?—No. Our system is almost entirely overground; overhead. We work upon the pole system with overhead cables really in the large towns. Where there are a great number of wires, we keep them all working upon the pole system entirely.

Mr. W. H. DICKINSON, called in; and further Examined.

*Chairman.*

4135. I UNDERSTAND that you wish to make a further statement, or, rather, to place some further information before the Committee, on behalf of the London County Council?—Yes, sir. I stated in my former evidence that in our opinion the service of the Telephone Company was unsatisfactory, and that complaints were made. Some of the Members of the Committee asked whether we had any special evidence of that. Upon that being reported to the committee of the Council, the committee resolved to issue a circular to the users of the telephone service in London, and on receiving the answers, they were digested and tabulated, and I have been instructed to hand the results in to the Committee. The circular was sent to all the subscribers of the National Telephone Company, numbering 7,329. It was in these words: "Sir,—You are probably aware that a Select Committee on Telephone Service has been appointed to consider and report whether the provision now made for the telephone service in London and other areas is adequate, and whether it is expedient to supplement or improve this provision, either by the granting of licences to local authorities, or otherwise. The highways committee of the London County Council, to whom the duty of procuring evidence on this matter is referred, being of opinion that telephone service in the metropolis should be rendered cheaper and more efficient, have submitted their views to this effect to the Select Committee, and similar evidence has been tendered by the Commissioners of Sewers of the City of London. The committee of the Council are anxious to know accurately what is the opinion of the users of telephones in London as regards efficiency, and I am therefore directed to ask if you will kindly answer the undermentioned questions on the accompanying form of reply, and return it to me at your earliest convenience;" and the questions were, (a) "Is the existing telephone service of the National Telephone Company efficient, and satisfactory to you? (b) If it is not satisfactory, in what respects is it unsatisfactory? (c) What suggestions, if any, would you make for the improvement of the service."

*Chairman*—continued.

Mr. *John Ellis.*

4136. Will you kindly give the date?—That was on the 6th of May 1895. In the result we received a total number of replies, 2,536, of which 555 subscribers expressed entire satisfaction, 1,981 were not thoroughly satisfied, and these 1,981 were made up of the following numbers: 1,305 who expressed general dissatisfaction with the existing telephone system; 350 who are undecided in opinion, but who make suggestions for improvement; and 326 who express themselves satisfied with the existing telephone system, but suggest improvements. I will hand you those figures in, sir. (*The document was handed in.*) They were also further analysed as regards the suggestions, but as they were very various, perhaps it will be sufficient if I hand to you that document, which gives the result of it.

*Chairman.*

4137. Yes, I will hand this round to the Committee?—The answers that we received were rather complicated from the fact that at the same time a circular was sent out by the National Telephone Company which evidently rather affected the answers which were sent to us.

4138. Which went first?—I should imagine they must have gone about the same day; I do not in the least know.

4139. Yours went out on the 6th May?—Ours went out on the 6th May. The form which was sent out by the National Telephone Company was to this effect: "We do not approve of the telephone service of the metropolis being undertaken by the London County Council, and are satisfied that the service given by the National Telephone Company is reasonable, having regard to the efforts which are made by the company to improve it by the adoption of the twin-wire system." A good number of those circulars

*Chairman*—continued.

circulars were returned to us, either by mistake in the affirmative, or else because the person who signed them wished to strike out words.

4140. Do you think the replies of the 5,000 subscribers who did not reply to your circular went to the National Telephone Company?—I do not know anything whatever about it.

4141. We shall hear that from the National Telephone Company, perhaps?—You will hear that from the National Telephone Company. As I say, certain of those forms which were sent out by the National Telephone Company came to us with the wording altered to the effect, either that they did approve of being handed over to the London County Council, or that they were dissatisfied with the service. In addition to that we had, apart from those circulars, a certain number of letters that came to us. One of them states: "I find that, although the company's service is a little better than it used to be, it is scandalously bad, and outrageously dear."

4142. I think, perhaps, the Committee can hardly go into individual answers, because, after all, it is very secondary evidence?—It is, sir.

4143. We have taken the general fact from you?—Certainly. I may put it in this way: there were a certain number of other letters that came to us expressing dissatisfaction with the company's service.

4144. It amounts to this, does it not, that out of 7,000 odd subscribers to whom the circular was sent, 2,500 only replied?—That is so.

4145. Out of those, 555 expressed complete satisfaction, and 1,981 were not thoroughly satisfied?—That is so.

4146. And even some of those, 326 of the 1,900, expressed themselves satisfied with the existing system, but suggested certain alterations?—Yes, sir.

Mr. *John Ellis.*

4147. That was rather in response, I think, to some questions I put to you?—It was.

*Chairman.*

4148. I am told that some of the subscribers who were communicated with have sent their replies to the Committee direct; that accounts for one or two?—And they are still coming in to us, we received 20 yesterday, so that a certain number of that 5,000 simply postponed answering the letter. Before I leave the chair, sir, may I explain to the Committee that our witness, Mr. Bennett, has been very ill, and that is the reason he has been unable to be called. Of course, we were very sorry that he was unable to give his evidence here, because it was his evidence upon the prices of foreign systems that we attached so great importance to. What he was going to say was almost entirely restricted to that, and it was based upon figures which he had put down in a document for us. If the Committee would like it we should be glad to furnish members of the Committee with that document, which gives the various prices that are charged elsewhere.

4149. We have already had put in by Mr. Preece (prepared by Mr. Lamb) the scale of charges in most European countries and the United States. Is it a statement of figures that you are speaking of?—It is heads of evidence proposed to be given. I think you have a copy of it, sir.

4150. I have a copy?—We had copies made, because they would have been so much more easily followed with the document, being a list of prices to a great extent.

4151. After all, it is only heads of evidence, and not subject to examination and cross-examination?—That is so.

4152. There can be no harm in your circulating it to the members of the Committee?—I will accept that suggestion of yours, sir.

Mr. *Benn.*

4153. I just want to ask a question with regard to the paper which was sent to the Committee, and which appears on the Notes, as to the County Council's estimate, an estimate which shows that London could be supplied at a rental of 10*l.* per subscriber for a system of 10,000 subscribers. Was this estimate simply the estimate of Mr. Newland or was it submitted to any other experts in order to ensure correctness?—There were two estimates which I handed in, the estimate prepared by our own engineer, which was done by him before we had communication with Mr. Newland, and which afterwards was submitted to Mr. Newland, and approved of by him. Then there was Mr. Newland's own estimate, based upon a rather different system, and both of these estimates were submitted to Mr. Bennett, and Mr. Bennett expressed his approval of the results, stating, as I think I have already put in evidence, that in his opinion the London service for 10,000 could be worked for 8*l.* per subscriber. Of course, if Mr. Bennett had been called he would have been able to answer questions accurately upon that. The Committee intimated the view that they did not wish to have our engineers called, so I contented myself by handing in those two estimates, which are in detail.

4154. Just a question upon these interesting figures that you have now put in. The circular which was sent out by the County Council was sent out on Monday the 6th May, I think you told us?—I think that was so, it is dated the 6th May.

Mr. *John Ellis.*

4155. It is dated the 6th, but was it sent out on the 6th?—I think so.

Mr. *Benn.*

4156. It was not sent out before the Monday, was it?—If I remember rightly, it was sent out on the Monday; I am told they were posted on the 6th and 7th.

4157. That would be Monday and Tuesday?—Yes, Monday and Tuesday.

4158. As to the inquiries sent out by the Telephone Company, what was the earliest date that you find upon those; I understood you to say that some had been sent to the County Council?—Well, we received this letter, which is dated the 6th May, which begins by informing me that a gentleman called from the National Telephone Office with a printed form that was dated the 6th May. I have no personal information of this.

4159. My only point is this: I want to ask whether

Mr. *Benn*—continued.

whether it is not a fact that some of the replies to the inquiries of the National Telephone Company were in the possession of the County Council before the County Council circulars were sent out?—I think that must have been the case.

Mr. JAMES STAATS FORBES, called in; and Examined.

*Chairman.*

4160. PERHAPS you will inform the Committee when the company sent out their circular of which Mr. Dickinson has spoken?—I think the County Council sent out theirs on the Monday; we sent ours out on the preceding Friday.

4161. I ought to ask you, for the sake of regularity, whether you are President of the National Telephone Company, and whether you appear here, as representing the company, to inform the Committee fully upon all the facts of the telephone service under the licence from the Post Office which has been held, I believe, by the company now for a considerable number of years?—Yes, we thought it was respectful to tender such evidence as might assist the Committee, and at the same time to be prepared with some sort of answer to the numerous complaints you have heard of the National Telephone Company.

4162. The Committee, I think, are anxious to hear that. Going first to the question of the circular, perhaps you will give the date of the circular sent out by the company?—It was sent out the Friday preceding Monday the 6th May, but it is not dated I see. That is the document, there is no date upon it.

Sir *Charles Cameron.*

4163. What was the date?—It was sent out on the 3rd May, "I (or we) do not approve of the telephone service of the metropolis being undertaken by the London County Council, and am (or are) satisfied that the service given by the National Telephone Company is reasonable, having regard to the efforts which are being made by the company to improve it by the adoption of the twin-wire system"; and the responses were, "signed unconditionally, 2,346; signed with qualifications, 266; signed in favour of the London County Council, 43; refused to sign, 36"; so that as regards numbers we seem rather to have headed them.

Mr. *John Ellis.*

4164. And what is the number of those who did not sign?—The same balance as in the case of the County Council. So many people were requested to express a feeling one way and a certain number expressed it; so many people who were asked to express an opinion upon another question have expressed it; and I think we rather scored as regards numbers.

4165. Did you send this out to 8,208 persons?—We sent it out to the whole of our subscribers, as they did.

Mr. *Snape.*

4166. Did you send any document besides the circular, any expression of opinion?—None whatever; simply that.

Mr. *John Ellis.*

4167. Five thousand five hundred and seventeen did not think it worth while to answer?—In either case.

Mr. *Benn.*

4168. If I may interrupt, would you just read the first question of that circular over again; I mean the company's circular?—The question is perfectly clear. It had become public property at that time from the reports in the papers of the proceedings before this Committee that the London County Council had particular views on this subject. We wanted to ascertain whether our subscribers concurred in those views, and this puts the question that they do not, as far as they express an opinion.

*Chairman.*

4169. I think the figures will speak for themselves?—They will.

Mr. *Snape.*

4170. You did not ask the question in any definite form, but merely generally?—They did send it back, and they understood what the object was, "we approve" or "we do not approve."

4171. Only about one-third of them sent it back?—As in the other case, in which about one-third sent an answer back. Of course, if you tout for a question to be answered in this way on any particular point, only a percentage of the people will take the trouble to reply. The County Council got our subscribers' lists, and they sent to the subscribers their circular the same as we did; we sent to all our subscribers that question.

Mr. *Grant Lawson.*

4172. Except that they asked for a reply, and you did not?—That is so.

Mr. *Benn.*

4173. Then there were two different questions; we sent out one question, and you sent out another?—Well, there it is, it speaks for itself.

4174. They speak for themselves?—You are welcome to the benefit of that.

*Chairman.*

4175. Is there any statement you would wish to make about the past history of the telephone as bearing upon the inquiry which is before the Committee?—Yes; if you will allow me, I think we had better get into the region of fact as affecting our company as soon as possible; therefore I have had three statements prepared dealing with various questions. The first is a telephone chronology, which I will hand to each member of the Committee. I think I had better commence by handing in those statements (*the statements were handed in*). There are three

*Chairman*—continued.

statements, and I shall deal with each in turn. On the first statement there are some material facts stated as bearing upon the initiation question of whether the company has been duly diligent in expanding the telephone system, and whether the delay or inefficiency of the system is attributable entirely to them or to circumstances beyond their control more or less. Now the chronology: Bell's Patent, 9th December 1876, expired in 1890; Edison's Patent was a little later (July 1877), and expired in 1891. The two patentees were in difference. They were quarrelling, and in May 1880 they put their horses together and amalgamated as the United Company: and as the United Company their responsibility began. The United Company started business on the 13th May 1880, contemporaneously with the date of the agreement under which they were amalgamated; they had been making efforts and attempts rather experimentally before that time; but on the amalgamation they began business seriously. Then the Post Office awoke, and proceeded to establish a right. That right was discussed and determined, as far as it went, by the judgment in the Post Office action on the 20th December 1880, and the first licence to the United Company was given on the 11th April 1881; but as the result of the judgment, and in accordance with the pledge of the Attorney General, Sir Henry James, that the object of the Postmaster General was not to prevent telephony, but simply to assert the privilege, he would be willing that the licences, or rather that the companies should work on under a licence; an agreement was embodied immediately, after the judgment under which we worked on feeling our way, until the eventual licence in the form of the first licence was completed and signed on 11th April 1881. That licence was full of limitations and difficulties, no doubt prompted by the legitimate desire of the Department to protect the monopoly of the Post Office; but it existed for four years and six months. Therefore, coming to the day from the dates of the patents, three years and four months had run before the amalgamation of the two competing owners of the patents in this country formed the United Company; and during the whole of that time any benefits of the licence of course were lost to those who had purchased it.

Sir *Charles Cameron.*

4176. Do you mean the benefits of the licence or of the patents?—Of the patents, not the licence.

*Chairman.*

4177. The first licence was for restricted areas, was it not?—Very restricted areas.

4178. In various parts of the country?—Yes, five miles round London, and one or two miles round certain other limited centres; and there were a great number of other restrictions. The operation of that, of course, for four years and six months from the date of the first licence—as we had occasion, I am afraid, to point out to the Post Office many times—was to absolutely restrict and suppress the development of the telephone. Well, under the second licence, we got for the first time what is called "an all-country licence"; I mean to say those limitations of area were entirely removed.

*Chairman*—continued.

4179. That licence extended over the whole of the United Kingdom?—Over the whole of the United Kingdom. Then, for the first time, we began to find out what telephoning really meant, and what it was capable of.

4180. These were licences granted to the United Telephone Company?—Granted to the United, and granted to several other companies, notably the Lancashire and Cheshire, and the National, and a number of other affiliated companies. Of course, no company could be formed for working the telephone without the licence of the patentee.

4181. So that, before business was commenced, it was necessary to get a licence from the Postmaster General, and also from the patentee?—Yes; the Postmaster General could license the area with reference to the Post Office rights; I do not like to use the word "monopoly"; it is so offensive. The licensee having that could not proceed to work in the area without the licence of the patentee; therefore, for that period, as long as the patents lasted, there was a double, so to speak, check upon the expansion.

4182. Were you connected with the United Telephone Company at the time of the grant of that first licence?—My connection with the United Telephone Company came about from the fact that I brought it about between the two companies. I was called in by the parties on either side to negotiate; I, in fact, was the author of the amalgamation.

4183. In 1880?—In 1880. A certain number of other licences, not great (there were 13 in all), were granted by the Postmaster General at different times to other companies, and all those companies, of course, were subject to the operation of those two licences, one to exercise telephoning in the area; the other to use the instruments and the patents. That went on, of course, till the expiration of the patents. The effect of the amalgamation, in view of the approaching expiration of the patents, was (each company having worked on for a number of years in its own area upon this principle) that it was much more likely in the interests of all parties that new business (business of this novel character) should be taken up by local people; that they should have the machinery in the different areas for raising the capital and for carrying out the work, and a great number of committees were formed in different places, some in Scotland, some in the north, and some in other places. They worked with their own directors and their own officials in their own areas under those two licences for a number of years. The first step taken to alter that position was when in the more important areas the Lancashire and Cheshire and the National Companies' area, which was a very large one covering a great many important places in England, and covering Scotland; when they had felt their way, when each in his respective manner according to local necessities had so far made the best of it. In the meantime, trunking having become very important (because we had very soon found out

that

*Chairman*—continued.

that the local business in telephony depended a great deal upon the question whether it was to be purely local or whether it was to be local and combined with communication from one centre to another); we found that, as a matter of practice, a great many people thought it worth their while to become local subscribers and to pay the local subscription for local objects; but a great many others did not think the local object of sufficient importance, and could only be induced to join the exchange if they had for what it was worth to them, the local service and the facility of trunking outside the area to other areas.

4184. When you speak of areas you mean areas of operation of the particular company?—Yes.

4185. Not area of licence which by that time had become the whole of the United Kingdom?—Yes; but the operation of the other limitation of area had led to these particular companies being, so to speak, localised in different parts of the country; therefore trunks became a very important part of the matter, and it was the questions arising out, not so much of what they were doing in their local areas for local purposes, which led to the necessity of this amalgamation. We found we were getting so tied up together and that the business was becoming so one, that we thought they had better come back into the fold; therefore we negotiated and brought back the United, or rather brought into the fold, the United, which was the parent company, the London Company; the Lancashire and Cheshire and the National, those at the time being the most important of the whole of the Telephone Companies.

4186. What date was that?—That was the 1st May 1889; therefore between starting business in 1880 and May 1889 these different companies had been working in their own fashion according to local circumstances on their own terms in their own area.

4187. Did they, in any case, overlap?—No, I think not, or at all events in very unimportant particulars.

4188. Then you say, on the 1st May 1889, they amalgamated and became one company?—They amalgamated and became one company.

4189. Under what name?—Under the name of the National Company. The parent company was the United, from the fact of Bell and Edison having united their forces; but when we came to the amalgamation of what was at that moment the largest portion, and very much the larger proportion, of the whole business, we thought "National" was rather a better term than "United," so we called it "National." Then there were a number of other affiliated companies which, I think, I had better perhaps refer to, companies which have had from the Postmaster General licences for particular areas.

4190. Licences for particular areas; were they not all unlimited?—Oh, no; they were universal licences, but they were limited to particular areas by the operation of the patents.

4191. Yes, by the operation of the patents?—I think there were 13 of them.

4192. I think you stated to the Committee in



*Chairman*—continued.

1892 these facts, so that perhaps you will take them very shortly, so as not to cover the ground again?—I was only trying to bring the history up to this, how we became one company. Under the obligations incurred by us in the negotiation with the Post Office, we undertook to effect, and have in fact effected, the fusion with us, of all the outlying companies besides the three.

4193. Do you say "under obligations incurred with the Post Office"?—Yes.

4194. Under what document?—We were, as a matter of fact, to be prepared to undertake that every one of these licences should be surrendered to the Post Office.

4195. Now you are speaking of the present agreement?—1892, the present agreement; the agreement negotiated in 1892.

4196. With the National and the New?—With the National and the New; the National, the United, and the Lancashire are the first three that came in. Then there was the Northern District Telephone Company; they came in in April 1890; the South of England Telephone Company, 31st October 1890; the Western Counties and South Wales Telephone Company, 1st January 1892; the Sheffield Telephonic Exchange, 10th March 1892; the Caledonian Telephone Company, 30th April 1892; the Universal Telephone Company. I need not trouble about that; that was a small private company; the Isle of Man Telephone Company; the Telephone Company of Ireland; the Thanet Telephone Company.

Sir *Charles Cameron.*

4196A. You are not giving the dates; will you please continue to give the dates?—Yes, I will give the dates.

*Chairman.*

4197. Up to that time those amalgamations had taken place before the agreement?—Yes.

4198. And not in consequence of the agreement?—In August 1892, we negotiated the agreement, and up to that time we had already got in the Northern District, the South of England, the Western Counties, the Sheffield Telephone Company, and the Caledonian. The Isle of Man Telephone Company, 1892; the Telephone Company of Ireland, 1893; the Thanet Telephone Company, 1893; and, of course, the New Company; another corporation, had their own amalgamation; the Mutual and the Stanhope; and they have all been acquired under that agreement by the National.

4199. As a matter of fact, I believe, at the time of the agreement being entered into by the National and the New, the National and the New between them, practically, had control of all the licences with the exception of the Irish Company?—That is so; the result of the amalgamation of the three great companies was that in view of the approach (as I have put it there as shortly as possible) of the expiration of patents, on the 1st May 1890 (you will see, sir, the patents expired, one on the 9th December 1890, the other on the 30th July 1891) there was a subscription in Manchester, Liverpool, and Warrington of 20*l.*; that was reduced from 20*l.*

*Chairman*—continued.

to 15*l.*; that was the first step. In those places (in Manchester and Liverpool especially) they had made such progress that we felt we could carry it on at a much more moderate rate than 20*l.*, and it was reduced to 15*l.* Then, on the 1st January 1891, having felt our way as to the advantages of the combination, of the fusion, the more economical working of great establishments, more effective service (such as it is), we concluded that a general reduction in rates in the provinces from 15*l.* in some places, and 12*l.* in others, to a uniform 10*l.* should take effect, which it had, from the 1st January 1891; and the effect of that reduction involved an immediate loss of revenue of 55,000*l.* on the then number of subscribers.

4200. Did that lead to a large increase in the number of subscribers?—Yes. I will give you the number of increase as we go on. This is the numerical progress of the thing. When we amalgamated the National Company had 10,813 subscribers; the United Company, 6,793; and the Lancashire and Cheshire, 6,230. That was a total of 23,836. In the first year of the amalgamation that total was increased by 3,870 new subscribers in the area, bringing the number up to 27,706. That was the year ending the 30th April 1890. In 1891 we took in the South of England, with 3,235 subscribers, and the Northern, with 1,551; that is 4,786 lines taken over. During that year there was an increase on the other part of the business of 6,183, making the total increase brought in 10,969.

4201. And making the total of subscribers what?—Thirty-eight thousand six hundred and seventy-five. In 1892 there was no other company brought in, but the increase in the number of subscribers was 7,788, bringing the 38,675 up to 46,463. In 1893 we took in the Western Company and the Sheffield, bringing in 5,442. The increase upon the other business was 7,126, being an increase in that year of 12,568, and bringing the figure up to 59,031. In 1894 we took in the Irish Company, with 1,550 subscribers, and of course in our business the new subscribers was 7,825. In that year the total increase brought in was 9,375, bringing the figures up to 68,406. And to the 30th April 1895, or rather to the 31st December 1894 (we had altered then our system of book-keeping and made the year end in December instead of April) we brought in 4,947, bringing the total up to 73,353. Therefore, from the year ending 30th April 1890 to 1894 we had increased from 27,706 to 73,353. That is the manner in which the thing has progressed.

4202. You stated just now with regard to these figures that in 1893 you took in a company. I think you had told me before that at the date of the agreement, which was August 1892, you had practically acquired the licences of all the companies except the Irish one?—These were brought in in 1893 by this table; therefore, I must correct that answer by that table. Perhaps, you would like me to hand this table in?

4203. Yes, I think we had better have it?—I think it is rather difficult for honourable Members to follow this table.

*Chairman*—continued.

4204. I think we had better have the figures on the notes in the form in which you have got them there?—That being so, I thought it might be interesting to bring it up to date, and that is the subject of the second table; that shows exactly how things were at the end of April. Perhaps you will allow me to go through that?

4205. Certainly?—You have the towns and places supplied, 537; number of exchanges open, 593; number of subscribers' lines, 75,216; number of telephones in use, 86,032; present ratio of effective calls per annum (I need hardly say that there are a great many calls and a great deal of work done which is not "effective"; we only deal with an effective thing, that call which results in one subscriber being put into connection and conducting his business with another), 139,639,032; of course, a call means one man wants to speak to another and speaks to him, therefore a call is followed by these two operations, a conversation consisting of two parts, one from the caller, the other from the called—that we call "a message," that makes 279,278,064 messages. That is, of course, estimated upon accurate observation or accounts from time to time. I do not mean to say it would be impossible, but it would be an enormous waste of time, labour, and expense to keep a daily record of the call of every operator, but these are based upon calls carefully noted at specific intervals.

4206. Intervals not specially selected from either one point of view or the other?—No.

4207. Fair average days?—They are so taken as to get a fair mean.

4208. Do you take them for a week or for a day?—We take some for a week, some for a day, some at different times; and if you would like to have the details, we will hand them in. We wanted, for our own purposes, to get some accurate knowledge, because, of course, to us it is a matter of importance to know how much the average call a day is. In some places it is certainly larger than in others. Now, sir, if I may say so, that being the development so far, I come to the tender thing of whether this service is charged for at an extortionate or extravagant rate. One would rather like to remove misapprehensions of that sort, which are formed by people who are both ignorant and unreflecting. When you know the facts, the big figure which frightens you in the distance looms into small proportions. Our average annual payment per line on the year ending December last was 9*l.* 2*s.* 2*d.* That includes all our areas, and all our towns, and all our places, big and little, lumped together.

4209. That is, payment by subscribers to the system?—Yes.

4210. That does not include, of course, private wire rentals?—That does not include private wire rentals; they have been taken out.

4211. How do you arrive at the 9*l.* 2*s.* 2*d.*, because you have so far only told us of a reduction to 10*l.* per subscriber?—Since then we have made a great number of reductions in the duplication of subscribers' wires. A subscriber pays so much for one wire, so much less for a second wire, and so on, and that brings down the average. You can only deal with averages.

4212. Certainly?

*Chairman*—continued.

4212. Certainly?—This is the average payment made by a subscriber for the use of his wire. By-the-bye, in order that there may be no misunderstanding, and that I may not be accused of attempting to "fog" this business, I should like to explain this: That factor here is somewhat difficult: "The subscriber" conveys no meaning. The Midland Railway is a subscriber, but they have a great many wires in different places. In some towns a company, corporation, or firm are subscribers in one name, but they have several wires, and they pay several subscriptions, and in order to get a reliable factor, which would stand you in stead in all cases, to see where you have been getting to, both as regards income, revenue, working, and so forth, we had to fix upon an equivalent to a train mile on a railway, the effective earning implement, which is a wire.

4213. A wire with a telephone at the end of it?—A wire with a telephone at the end of it.

4214. And connected at the other end with an exchange?—Yes.

4215. In the case of the Midland Railway Company, or other companies of that kind, who may subscribe for 15 or 20 instruments, you count them as 15 or 20 subscribers for that purpose?—Take my own case. I have got four or five telephones in different parts of London in my own name. If that were a subscriber it would be one man. There are four or five different connections.

Sir *Charles Cameron.*

4216. Just one word of further explanation: I have, for instance, three telephones in my own business; what do you reckon those?—Do you pay for three wires?

4217. I pay extra, I presume, for each instrument?—Then you pay 10*l.* for one, 8*l.* 10*s.* for another, and something less for the third.

4218. I do not think it is so much?—Well, whatever it is.

4219. I want to know how you reckon it; I merely want to understand?—Each payment is in virtue of the use of a separate wire inside the same building.

*Chairman.*

4220. I think I can put a question which will explain it: if a subscriber has a single wire to his house, and inside his house he has three telephones, and can be switched from one to the other, that is one wire, is it not?—That is one wire.

4221. And if there are three telephones, three wires, and three connections, that would mean three subscriptions, would it not?—Yes.

Mr. *Benn.*

4222. The same analysis would apply, for instance, to the system of Berlin; it is not peculiar to this country, is it?—I think not; oh, no.

4223. That is to say, it would reduce the apparent subscription in Berlin in some way if you split it up on this mileage system?—Yes, it would. The honourable Member says he has three: for the initial one he pays 10*l.*, we will say, for the sake of the argument; for the second one he pays 8*l.* 10*s.*, we will say; and for the third one something less, that wears out into an average subscription of less than 10*l.* Now, what is this service, when you come to think of it? What is a message? Well, it is very low to estimate it at a minimum of a hundred spoken words. I do not know whether any honourable Member has ever had the patience to count a conversation, but you can speak 400 words in three minutes, and applying the estimated average of words per minute per message, taking it at a hundred, which is extremely low, you get this: that the average cost to subscribers of a message is ·58 of a penny. That is one way of looking at it. I do not know whether that to people who use the telephone very largely is a figure which can be called extortionate or extravagant, or that it is a ground for grievance.

*Chairman.*

4224. That is to say, the charge per conversation on the average in the experience of the company is slightly over a halfpenny?—On the subscription. The annual revenue, divided by the number of messages of the subscribers in the aggregate, comes out at ·58 of a penny. Now, I will put it in another way. I will test it by something else. I myself use the telephone some days hundreds of times; if the telephone company were to say to me: "Mr. Forbes, you must pay 20*l.* instead of 10*l.*, or 50*l.* instead of 20*l.*," it would not cause me to do without it. It has become a matter in commercial (almost in some sense in social) relations so important to some people that the question of price, the present price, at all events, does not in the least influence them. It has become a necessity, and a necessity of such immense value to the people who use it most that the price is ridiculously low.

4225. That is, to a person who has already experienced the beneficent operation of the telephone?—To people who have taken the trouble to learn how to use the telephone.

4226. But that would not necessarily apply to a person who has not yet had that experience, and therefore does not appreciate the real value of the telephone?—No; therefore I am going to put the thing in another way: Suppose the case of people who do not require, and who have not taken the trouble to learn what an enormous auxiliary and comfort a telephone may be in business and private; what is it as a mere auxiliary in your house, or for limited purposes? Well, it costs 9*l.* 2*s.* 2*d.* a year, that is as nearly as possible 3*s.* 6*d.* a week, that is sixpence a day including Sundays, because you can telephone on Sundays, and you can telephone in the day all day to every place, and to many places all night; therefore, to put it fairly, every subscriber can at his discretion have the use of the telephone in the day, and in most places in the night, for the price of the sixpenny telegram; and whereas 100 words by telegraph would cost 4*s.* 2*d.*, the average cost per message (minimum a hundred words) by telephone is ·58 of a penny. Now if you examine it by the facts, what becomes of all the outcry about the extravagance of the telephone? I will leave that

*Chairman*—continued.

for the honourable Members to attach such value to as they think fit. Then the comparison of charge with other European countries: that is another very sore place. There does not seem to be any very accurate information presented to the Committee upon that point. A good many tables have been put in, and we have heard some statements, but I think we might perhaps have them stated with a little more accuracy on some points. But taking them for what they are worth, I should very much like the Committee to consider how important it is, when you are dealing with matters of this kind, to know what the facts are; and, knowing what the facts are, to apply the facts to the circumstances. Now when you come to that, in comparison with New Zealand or Stockholm it is futile. The facts as regard the figures want to be known first. When you have got the facts as regards the figures, you must know the conditions, the social conditions, the climatic conditions of places, and what a telephone means in one place as compared with what it means in another, before you can form any estimate of its relative value or its relative use. Now our subscription, being 9*l.* 2*s.* 2*d.* on the average, is said to be extravagant. I will leave out for the moment all questions of a more or less efficient service and deal with the price. But, now, is it extravagant? Well, I do not think it is. From my point of view, certainly those figures do not seem to encourage the complaint of extravagance. But if it is extravagant, is it entirely our fault? Well, I do not think it is, as I will show you, if you will allow me to call your attention to this paper. The price, of course, has to cover the costs, all the costs, and taking 9*l.* 2*s.* 2*d.*, I have asked this question of myself, and I wish to present it to the Committee; what would the charge be, or what could it be, upon the assumption that the National Company were relieved from those direct and extraneous charges not pressing, or very slightly pressing, upon State telephones abroad? There, of course, I mean Stockholm, Berlin, Switzerland, and several other of our model examples, Berlin included. There is such a thing as what is called royalty, also wayleaves, and, of course, rates and taxes; for the ingenuity of the tax gatherer has found its way even to telephone wires and telephone establishments; and then another very important matter (which we feel in this country not only in telephoning, but in manufacture) is the greater relative scales of salaries, wages, and rents of premises. Those are two items, "A" and "B." Now, you will see what relative importance they have when you see the figures. In the year ending 31st December 1894, the working expenses of the National Company amounted to 456,809*l.* 15*s.* 4*d.*, or 62 per cent. of the telephone revenue; 62 per cent. of the telephone revenue was absorbed in the working expenses. The charges under "A" (that is royalty, wayleaves, and rates and taxes) amounted to 147,938*l.* 10*s.* 1*d.*; that is a shade over 20 per cent.

4227. Just one moment; you are speaking of these as charges which the Telephone Company have to meet, but which the State would not have to meet: you do not apply that to wayleaves, do you?—In a great measure I do.

*Chairman*—continued.

4228. To some extent?—To a very large extent.

4229. Of course, you are aware that the State has to pay wayleaves in various parts of the country, and sometimes heavily?—I am talking of the States in other countries.

4230. You mean to say that in some countries the State is relieved of wayleaves by statutory rights, which enable them to evade the question of wayleaves?—Yes; of course, one is at a disadvantage in not having the profit and loss account of the foreign countries. I have sought for it very carefully, and cannot find it; I have been trying to find it in the postal statistics of the Department, in the case of Berlin, for instance; we do not know what their profit and loss account is; I cannot find any details as to that, but I know, as a matter of fact, that their payments for wayleaves are extremely small.

4231. I believe in Berlin they merge all their telephone accounts in the postal accounts, and keep no separate telephone account?—That is so. I do not know what they "keep," but I know what they give to the world. Then I will come to the charges under "B." Now is it, or is it not, a fact that wages in England are relatively higher than they are abroad? I only know that (rather from a patriotic and sentimental point of view) it shocks me when I find that in this very business we are obliged to go not to England for wire, but to Cologne, where we get the best wire that is possible for our business at the cheapest price, there being no sentiment in business. Why? Well, I happen to know why. I have been a very large employer of labour in Germany myself in collieries and ironworks, and I know quite intimately the interior of this manufacture of the people near Cologne. Labour: I have tried to bring that home to you by showing that in the charges under "B" amounting to 214,123*l.*, they start with the line and instrument repairs, 93,537*l.*; and I had the curiosity to have analysed, a long time ago, what proportion of repairs, maintenance, was labour pure and simple. Of this amount of 93,537*l.* wages stand for 72·87 per cent. of the whole; that comes to 68,000*l.* out of it. The wages paid in Great Britain to the people employed in this category (skilled labour) are about 33 per cent. higher than they are abroad; certainly in Germany or Stockholm.

Mr. *Benn.*

4232. Might I ask you on that, would you say 33 per cent. higher than in America or Canada?—No; I do not know about Canada.

4233. Canada is rather important?—Yes, it may be, but I am dealing with the comparisons which have been forced here in this Committee, particularly Stockholm and Berlin.

4234. But of course they have extended over some American cities particularly, and Canada also?—Yes.

4235. I did not know why you had left out Canada, for example?—Well, let us deal with the particular, Stockholm and Berlin. I shall

Mr. *Benn*—continued.

shall come to Canada, if it is necessary, later, and to America. Well, that is one item. That item alone, assuming that that statement is pretty nearly correct, gives 22,719*l.*

*Chairman.*

4236. Extra?—Extra. Now salaries. The salaries of officers, clerks, head office expenses, and rents of premises; we have left operators out of this, because I am almost grieved to find that our operators are paid on the average certainly not more than they are in Berlin or in Stockholm. I daresay I could find reasons and explanations for that. I think the available women's labour in this country, particularly in places like London, is much more (sad enough to say) abundant than it is in either Berlin or Stockholm.

4237. And you find the wages paid to the operators about equal the wages paid in Berlin or Stockholm?—Yes; I am almost afraid I may say they are a little less than those. They may be a little less, but they are the market price, and for every operator we have a vacancy, for there are 20 applicants on those terms. With respect to the higher class of things, what you call the brain business, the payment here in England is enormously greater than it is anywhere on the Continent. You have got to meet it, and I put that down at 30 per cent. That, you see, takes another large lump, 36,000*l.* That makes 58,879*l.*, or about 8 per cent. more goes in those items. Now, if they are anywhere near the mark they are incidental to the conduct of the business in this country with this machinery, and they have got to be paid for. Who is to pay for them? The telephone user. But the average payment being 9*l.* 2*s.* 2*d.*, the working expenses, including these items and all others, come to 6*l.* 4*s.* 7*d.*; this is on the account of one year, the year ending December last. But if you come to apply the figures I have given you, even assuming them to be somewhere near the truth, those working expenses are reduced to 3*l.* 8*s.* 4*d.*; they are less than at present by 2*l.* 16*s.* 3*d.* Now, if the Postmaster General will give up his royalty, if we can get our wayleaves for nothing, or next to nothing, or upon terms adequate to those which are paid in Stockholm or Berlin, and if we can get rid of the rates and taxes (I do not believe the Post Office in Berlin pays rates and taxes on its wires); very well; that would be a different position. We should be most happy to be assisted in that way, then we should have a charge of 6*l.* 5*s.* 11*d.* That brings it down very nearly to these ideal hypothetical illustrations which seem to be the substratum upon which is built up all the theory and illusion we have been listening to. I am sorry to say, sir, I must excuse myself for being in some sense both a witness and an advocate. You see I have to defend the position of the National Telephone Company. I cannot afford to deal with abstract propositions; you must look at the facts.

4238. I think it is facts the Committee want. We have had a great deal of opinion expressed, and we are very glad to get facts?—I was rather anxious that the Committee should really

*Chairman*—continued.

be put into possession of the facts relating to the position of the National Telephone Company and telephoning in this country really.

4239. I understand the case you put before the Committee is that the business of telephony in this country is carried on under circumstances which makes it much more expensive than it is in the countries with which it has been compared in Europe?—Yes.

4240. Specially with regard to Berlin and Stockholm?—Absolutely.

4241. That is to say, these charges which you have indicated, and the amounts of which you have given, to a very large extent do not exist in those cases, and therefore the comparison from that point of view is not a fair one between England and Berlin and Stockholm?—Exactly; the same underlying principle as compels me against my will, when I have a dozen tenders lying on the table for wire, to select the lowest, and that is in Germany. I know why it is the lowest; it is because the burdens of industry there are lighter, and wages are much lighter; that is why.

4242. Still, that is not a difficulty for the National Telephone Company. You go into the cheapest market?—We do.

4243. And buy your material or plant on equally good terms with Germany or Stockholm?—Unfortunately I cannot buy the labour; I cannot get the German labour here.

4244. Therefore you have to pay higher wages?—We have to pay much higher; wages is the great thing; wages is the thing that is going to ruin us.

4245. Have you anything more to say upon that particular point: the extra charges that the company have to meet as compared with Germany or Stockholm?—No, I think that is a fair statement for starting cross-examination or founding a view. I put it to the common sense of the Committee as to whether it does or does not explain, and whether it does or does not justify, the moderate average charge which the facts show to be the charge of the National Telephone Company.

4246. What particular point are you going to next?—I am going to some other points as affecting the care and efficiency of the service; I think I have disposed of the price. Now, another complaint is the comparative inefficiency of the service.

4247. Perhaps before you go to that—it is rather kindred to the subject you have been dealing with—have you any statement to make with regard to the demand for the telephone in this country as compared with countries like Germany and Sweden and Norway?—I think so. I think one has to consider what the conidtion of things is is in Germany or Stockholm. I do not know whether any gentleman here has lived in Berlin; I have; and to compare Berlin to London, or to compare Stockholm to London, or North Germany with England, or Sweden with England, is an entirely misleading comparison. London is, no doubt, for its population, the particular city in the world which has less telephones than any other, having regard to the number of its inhabitauts. Why? Well, I do

*Chairman*—continued.

not believe the cause of the "why" is to be found entirely in the cost, or entirely in the efficiency of the service. It is to be a great deal more found in the difference of circumstances in London as compared with other places. Take, for instance, the relative position of the telephone and the telegraph. The telephone is a more convenient, evidently cheaper, and rather more satisfactory method of communication between minds than telegraphing; but, of course, I suppose the relative spread of the telephone would depend upon how far the telegraph has met the reasonable wants of the general public. That brings me to this: I am obliged to call in the evidence of a very eminent person, the Postmaster General of Germany. He is good enough to compile a number of very interesting statistics bearing on postal matters.

4248. Is that Dr. Von Stephean?—Yes, Dr. Von Stephean. I do not know, I may be misled about it, but it rather struck me that those figures might, perhaps, give us some indication how it is that telephoning in England does not progress as rapidly as it does in Germany and in Sweden, and in some other places. Here are some tables which show, first of all, the population of different countries. It then shows the number of inhabitants to the square kilometre, and it goes on to divide that over the post and telegraph. They apply the telegraph service of the different countries to every hundred inhabitants. How many telegrams are there in each of those countries to every hundred people? Now, suppose we take Sweden to start with, 30·7. Well, now, I can understand that.

4249. What does that 30·7 represent?—30·7 telegrams to every hundred of the inhabitants.

4250. Telegrams sent in the year?—Yes, 30·7. Now, in Great Britain it is 177·1. Well, if the inhabitants of Great Britain are so blessed as to have 177 telegrams to every hundred people, as against somebody who has only got 30, it would appear rational to induct that the telephone would probably, in that country, spread more rapidly than in the country where there is 177. Take Berlin, or rather Deutschland and Germany, where there are 55.

Mr. *Snape.*

4251. Per hundred?—Per hundred of the inhabitants, 49,428,000 inhabitants, and that is the average rate per hundred in telegrams. In England, Great Britain, it is 177; therefore the telegram is a much more severe competitor with any other means of conveyance, like telephoning, which is another form of telegraph, than it can be in any of those other countries. Now, there is something in the habits of the people.

*Chairman.*

4252. I understand you to mean that where the telegraph service is a very efficient service, and very largely made use of, you would not expect to find such a demand for telephones as you would in a country where the telegraph service was much less efficient?—No.

Mr. *Benn.*

4253. Does not that show that the people of those countries where the telegraph is very little used comparatively, find the telephone service so cheap and so much more efficient that they naturally use the telephone instead of the telegraph; that is to say, the citizens are very much benefited by the similar service at a cheaper rate?—Is it so much cheaper? We have not come to the question of cheapness yet.

4254. I ask you?—I have told you what the service is; 58 per cent. of a penny per conversation.

4255. The point I was wishing to inform myself upon was this: you have told us that in this country the telegraph service is 177 per hundred?—Yes.

4256. And in Sweden only 30?—Yes.

4257. As tending to show that where there is a good telegraph service the people do not want the telephone?—Not to the same extent; they do not realise the want of it as rapidly as it is realised in another place.

4258. Does it not prove this: that the people in Sweden, being provided with a cheap telephone service, find it is better and cheaper to use the telephone than the telegraph?—It may; you may induct that.

Mr. *Snape.*

4259. May I supplement the question by asking whether you can give the Committee a statement with reference to Germany similar to the one you have given with reference to yourselves as to the telephone on the Second Statement; then we can compare them for ourselves?—As to what development they have made?

4260. Not so much the development, as the ratio of effective calls, the cost to subscribers per message, and so on, the later details of that Statement No. 2. Then we could compare the figures for ourselves as to whether the telephone was more used because it was cheaper there than here?—This is, what it gives for the whole of Germany, that is the German Postal Union, including, I suppose, Bavaria and Wurtemburg; the number of places having telephones, is 442.

4261. Is that the whole of Deutschland?—The whole of Deutschland. The number of telephones is 91,458; the number of subcribers, 84,129; the number of conversations, 391,388,000.

4262. That is equivalent to your effective calls?—That is our effective calls multiplied by the two messages or conversations.

4263. How many do you say?—391,388,000. Of course you have to compare that with the population, which is 49,000,000, as against ours which is a good deal less, 39,000,000; and (which is material) that this business in Germany has been in the hands of the State from the beginning mostly, and it has had all the prestige of the State, and all the advantages of the State organisation, and the advantages which the telephone in this country has not yet had, but which, happily, the enlightened department have made part of the condition of the agreement they should have, that is to say, the use of the post offices for the purpose of telegraphing and telephoning. We have made almost as much progress,

Mr. *Snape*—continued.

progress, with all our blunders and faults in England (this private company restricted and limited for a great portion of the time by the policy of the Post Office, and without these concurrent advantages which have made the telephone so valuable in Germany), we have made almost as much progress as they have.

4264. Have you worked out the cost to the subscriber per message in Germany, the same as here?—No; they do not publish statistics of that kind; they give the general receipt of the whole postal business, including letters, telegraphs and telephones in one large lump; and they give the outgoings, that is all; and that is all the information they give of the financial part. Allow me just to put it quite plainly; this is what seems to be the case: the whole thing I find is on page 60 (no doubt, sir, you have this at the Post Office), the finance. The receipts for the year 1893-94 were 290,615,418 marks, the Ausgaben, the expenditure, 270,887,743 marks, leaving a balance (Ueberschuss) of 19,727,675 marks, that is to say, about a million sterling, or nearly a million sterling, of profit upon the whole of their operations, postal packets, financing, insurance, telegraph and telephone; but they give no details; therefore I cannot tell you, as I can with our accounts, how much a message it costs.

*Chairman.*

4265. I think you were going to state the special circumstances of this country as compared with foreign countries, which tend to diminish the demand for telephones?—I have often asked myself the question why, in London, the call is so relatively small, not pressing. First of all, as regards the telegraph administration in London, the account (of course, I am not in possession of the figures; I believe they are in the Post Office account) shows what an enormous use is made of the telegraph in London, very effective, very prompt. That is one. Then I do not know whether the multiplication of deliveries of letters in a great city has anything to do with abridging the importance either of a telegram or a telephone message; but I suppose in London you have as many deliveries as in Berlin, or in Stockholm; somewhat more I fancy. Then, as to the habits of the people: I do not know any city, I have lived in a good many, where the commissariat is carried on as it is here. Mr. Slater, the butcher, Mr. Charles, the fishmonger, Messrs. Cambie & Pratt, the poultry people, will send every day to your house for orders, and a bill of fare from which to order; they go away, and deliver the thing. That has become the habit of London. You cannot get that done, that I know of, in any city in the world. It is not done in Paris, it is not done in Berlin, it is not done in Stockholm. There the habit is marketing. That means movement, and until the telephone came it was a serious call upon people in all weathers. I daresay Berlin and Stockholm are not quite all the year round such pleasant places or so easy to get about in as London. I have known Berlin, for weeks together, almost impassable. You could go out, of course, you



*Chairman*—continued.

could move about, the men who had business on the exchange got there; but movement was greatly suspended, and people suffered great inconvenience. The telephone has become valuable, because at a relatively low price they can pay for the saving of that inconvenience. The same in Switzerland. The telephone goes now in Switzerland to places where even the telegraph did not go, where there was no access except by mule track, or by roads which were impassable for long periods in the year. All those places are now covered with telephones. People are kept in touch with civilisation by the telephone, which is erected at a very small cost by the Swiss State.

4266. The commissariat argument would apply to the residential portion of the town more than to the commercial?—The residential; and therefore there are many reasons, and until people will take into consideration the facts, first of all as borne out by the figures, and then circumstances, it is quite idle to be denouncing people for not doing something in one place which is impossible to be done under the circumstances, although it is quite possible in some other places. Now, sir, another branch of the subject is the badness of the service and the cost. I have disposed of the cost, and I am now coming more to the cost of installation; figures such as we heard from General Webber; some impossible price at which London could be installed, and even the estimate put in by a gentleman for whom we have considerable respect; we trained him, we know his capacities; all he knows about it he learnt from us; he was one of our own officers.

4267. You are speaking now of General Webber?—He learned a good deal from us; he was with us for some time; he was a director of the company when it was first united.

4268. Who are you now speaking of then?—I am speaking of the gentleman who made an estimate, which I shall come to, of how London is to be telephoned.

4269. What is his name; we shall identify him then?—Mr. Newland.

4270. You do not agree with his figures?—It is impossible to agree with them if you understand the question.

Mr. *Benn.*

4271. Would you say the same of Mr. Bennett, who confirmed those figures?—We also had the pleasure and honour (if it be one) of training Mr. Bennett; we know him very well. I have not seen Mr. Bennett's figures, by the way.

4272. No; but when he was appointed your chief engineer, was he merely an apprentice, or was his training prior to his appointment?—Oh, prior, of course; he was trained in our service. Whose chief engineer do you mean?

4273. Mr. Bennett was associated with your company in several important matters; I think he was chief engineer of part of your service?—Hardly "chief engineer."

4274. Well, it is not an important point; but you spoke of training all these people. Now, for instance, Mr. Bennett was engineer for the National, chief engineer and electrician in Scotland and Ireland of the National Telephone

Mr. *Benn*—continued.

Company in 1883, was he not?—I do not think so; does he describe himself as such?

4275. And was he not also chief engineer, general manager, and electrician for Scotland and the north-west of England to the National Telephone Company from 1883 to 1890?—I do not admit that he was. I will tell you what he was chief engineer of; the new company.

4276. The New Telephone Company?—Yes; I daresay you will approach that by-and-by, then I shall be able to tell you something about it. But what I want to deal with is the initiation. Who formed the telephone in this country? Why the people who started it; the licensees. They had to find and create the people; they were not trained; you could not go and pick them up in the streets; they have had to find out their way, and in finding out one's way, it is like the railways; I was early enough to remember the training of the railways; I myself was born in it. We had to make the thing, and I remember one of the very first things that puzzled Mr. Brunel was this. He said: "Well, we have made a railway, and we can run engines upon it, but how we are to become carriers, and find the people who can conduct this business commercially, is quite a new problem." Well, we have had to solve this question of training people as well as adapting ourselves to the commercial necessities, and we have made mistakes. I have no doubt if we had all been as wise as we are now (it is so easy to be wise after the fact) we should probably have avoided the drawback of the single-wire system about which we hear so much complaint, well-founded complaint. Everybody admits that the single-wire system is a mistake, but it was the fashion at that time; and the oddest thing in the world is that Berlin, which is the great example, and which has certainly the largest number of telephone exchange subscribers of any city or place in the world, is absolutely single wire at this moment. Very well; we started the single wire, and no doubt the single wire is the cause of a great deal of the discredit that attaches to our company; but we are quite sensible of that. We have not conducted this business under our responsibility to the Post Office and to the public for a number of years without learning our business; I admit that we are learning our business; we are now doing it, and what I am rather anxious to put into the minds of the Committee is what we on our own initiative have done. We recognised from the beginning that we were agents of the Post Office. I have good-humouredly said sometimes at the Post Office, when I have had the pleasure very often of meeting Mr. Lamb and other gentlemen when I walk into the Post Office, "I feel that I am just as much an official of the Post Office as any of you gentlemen." The Post Office have charged us with a public duty, and I will not say how we have performed it, because I ought not; but we recognised what our duty was to the Post Office and to the public by adapting ourselves (as soon as our experience convinced us we were wrong) to the right system. Now, about this great question (which is a great question) of the metallic circuit; I want to see what we of our own

Mr. *Benn*—continued.

initiation have done; I then want to see what we are prepared to do; what we are doing. We have got a settled policy; we know quite as much about this as Mr. Bennett, or the General, or the other people.

*Chairman.*

4277. Mr. Bennett has not been here as a witness owing to ill-health. He was referred to through another witness as having corroborated a certain statement. I think it would be better to leave Mr. Bennett's name out; he has not been before the Committee. General Webber has; his evidence is before us?—I should not have mentioned the name of Mr. Bennett but for the question of the honourable Member. Then I will drop Mr. Bennett for the present. Now, sir, this is a statement showing the "Proportion of plant working and ready for metallic circuits," and if you will allow me I will hand it in. (*The document was handed in.*) We have recognised all the objections to the single wire in important centres, and we have set ourselves to work to repair the wrong done by relying too much upon the single wire, and this table shows where we are at the present time; it is the "Proportion of plant working and ready for metallic circuit"; "number of exchanges fitted or in process of fitting with complete metallic circuit wires and switchboards, 117."

4278. This applies to the whole country?—Yes, representing a total of 18,978 subscribers' lines. "Number of exchanges fitted with metallic circuit switchboards not included in above, 78, representing a total of 20,995 earth circuit lines"; that is to say, we have got the preliminary and most important accessories (the boards) ready. The lines can be added, of course, and instead of being 20,995 earth circuit lines, they will become, in the course of time (and not a very long time), metallic circuit lines.

4279. Is the alteration in the board one of the most difficult and complicated operations?—It is one of the most difficult and complicated of all the business, the switchboard. Then the number of metallic circuit subscribers working on metallic circuit and earth circuit switchboards, a sort of hybrid, 706; and the number of exchanges fitted with earth circuit switchboards and lines, 398. They represent a total, those two, of 22,485 subscribers' lines. The material point there is summed up in this one thing about London. At the end of this year London will be entirely on a metallic circuit.

4280. Every subscriber will have a metallic circuit; the twin-wire system?—Every subscriber will have a metallic circuit. Of course, it is a very serious thing, not only in respect to cost, but in respect to the terrible disturbance which must take place in the conduct of the service during the time of transition. It is exactly like trying to carry on an enormous traffic on a railway when you are re-laying the line; it is the same thing; you must have disturbance, and I have no doubt that the greater part of the complaints that have been properly launched against this company during the last three or four years, the time which it has taken to carry out this complicated business, is attributable to the fact that people were disturbed in occupation.

For

*Chairman*—continued.

For instance, one prolific source of complaint has been the changing of numbers. A man was on our exchange for a particular number; the fact of reducing the number of exchanges and putting two or three sets into one involved the alteration of a man's number, a serious difficulty to a man who had printed his circulars, and sent them all over the kingdom, whose correspondents knew he was Number So-and-so; then to have his number suddenly changed was very inconvenient. As a matter of necessity the transition from one system to another was serious. The interruption of wires, constant during the process of construction above the wires thrown and touching other wires, producing all sorts of derangement during the four years, has been, no doubt, a source of great individual annoyance and inconvenience. We cannot help it. If we could have foreseen that when the system was first laid out we could have avoided it, but then we did not and could not see it. We are going on doing that work at a very great cost.

4281. You have said that in London by the end of the year it will be a complete metallic circuit?—Yes.

4282. With regard to other towns in the country can you give us any facts?—Manchester is going on very rapidly. Glasgow is a place that we are prepared for by putting in there a very fine board. That is a place which I believe is not slow, sir, in making its grievances known. We admit that in Glasgow the service is not what it ought to be, but as a matter of principle we have determined that it shall be when we know where we are. We cannot carry out these works without the concurrence of the authorities in a place like Glasgow, and I venture to suggest to the Committee (in fact, I pledge the company) that we are ready at all costs to give Glasgow the best service that can be got, a metallic circuit, if we can be assured of the concurrence of the authorities to enable us to do what must be done to give it.

4283. Is it the case that an effective carrying out of a great change like that from a single-wire system to a metallic circuit system does depend to a great extent upon the harmonious co-operation of the local authorities?—It must be so.

Sir *Charles Cameron.*

4284. There were witnesses up here from Glasgow, brought up, I understood, by your company, to give evidence as to the general satisfactory nature of the work of the company in Glasgow?—There were.

4285. Then you do not agree with them?—I do agree with them.

4286. You agree that it is unsatisfactory, and you pledge yourself to make it satisfactory. They gave evidence on your behalf that it was satisfactory?—No, not quite; they said it was not nearly as unsatisfactory as the other Glasgow witnesses said it was. Nobody pretends that it is as good as it might be.

4287. You are aware, probably, that since your witnesses were up the Town Council have taken means to find out the opinion of the telephone users similar to those means which you



Sir *Charles Cameron*—continued.

and the County Council here have adopted in London?—I was not aware of that, sir.

*Chairman.*

4288. You were stating that the company intended, with regard to Glasgow, and I imagine with regard to other places, as rapidly as the circumstances would allow, to change the system to a metallic circuit system?—If you remember, sir, I stated before the Committee two or three years ago, in 1892 (I have been reminded of it by witnesses here) that a great deal of the service was monstrously badly done. So it was. But the witnesses omitted to follow up that statement by stating the reasons which I gave the Committee as to why it was bad; but that is not important. We have admitted, we have realised, we are taking measures, and have taken measures, and have spent 200,000*l.* up to this moment in substituting metallic circuit for single wire, and we are going on; but it cannot be done in a day, and it cannot be done without during its doing inflicting a certain amount of annoyance on the subscribers, and it cannot be done in places like Glasgow without the concurrence and assistance of the local authorities. That is all. And therefore the complaints of Glasgow, whatever they are, however they are got at, can be met by the metallic circuit whenever we can carry it out with the assistance of the authorities. Then, sir, about the great advantages of competition in a particular area; well, that has been a matter of a good deal of speculative evidence, but one experience is better than a great deal of speculation, and we have experienced it in Manchester. What is the result to the public of two people competing with each other in one area? There we had an illustration of all the theories, all the tempting things that are put into these circulars to people inviting their complaints against a system as being both dear and inefficient. We had that played out in Manchester. There a great number of subscribers by solicitation (yes, I think "by solicitation," I will not put it stronger than that), were induced to subcribe to a telephone system on the theory that it would turn out to be cheaper and better than the existing one. Well, it was carried out, the company was formed, subscribers were enlisted in that way; they were also invited not only to be subscribers, but shareholders; and now we know the result, and you have only got to induct from it whether really that experience is one which would make it a desirable thing to follow. Here is the story, sir. I will just hand copies of this document round to the Committee. (*The document was handed in.*) This, sir, I have had prepared with great care by Mr. Gaine, our general manager. I am not one of those people who take a statement myself without taking the trouble to realise its accuracy by my own investigation; but Mr. Gaine has the credit of these statements, and I endorse them, having examined into the truth of them.

4289. These are statements relating to what?—This is the story of the Mutual Company at Manchester, founded on the strength of complaints against the National Telephone Com-

*Chairman*—continued.

pany, as regards the inefficiency of their service and the extortionate character of their charge. Now, the date when the Mutual Company's Exchange was opened at Manchester was the 28th February 1891. They opened with 170 people. Their method of obtaining subscribers was to invite them to become shareholders, and a great many of them were shareholders. They had a subscription of 5*l.* a year for shareholders in virtue of their having taken one or more shares in the undertaking. They also started upon a 6*l.* subscription for non-shareholders; and this is the story: Number of subscribers to the New Telephone Company at the end of April 1895, 1,349. The Mutual became the New. The Mutual Company took several forms, and eventually, at a greatly enhanced price, found itself in possession of the New Company. This was one of their bargains. They then had 1,349 subscribers at the end of April 1895. On the 28th February 1891, the National Company's subscribers, when they commenced working, were 1,944. In April 1895 the National Company's subscribers in Manchester had grown to 3,374. The number of the National's subscribers who gave up the National to join the Mutual was 27.

4290. I see, under heading 5, you bring in Bolton?—Manchester and Bolton, yes; there is a small business at Bolton which is hardly worth mentioning. That is the Mutual. Number of National subscribers who gave up the National to join the Mutual, 27. Number of National Company's subscribers who were also New Company's subscribers at the end of April 1895, 492. Now, this was the result.

4291. What were the charges of the two companies?—We were 10*l.*; they were 6*l.* to non-shareholders, and 5*l.* to shareholders. That pound was the recognition of their having a share.

Sir *James Fergusson.*

4292. May I interpose a question: Are there still subscribers to a separate system known as the New Telephone Company in Manchester?—Oh, yes.

4293. Still?—Still.

4294. And some of them in connection only with the New Company's wires?—Yes, sir. At No. 7 you will see the number of the National Company's subscribers who were also New Company's subscribers at the end of April 1895 was 492; therefore 492 people, in consequence of the existence of the New Company thought it worth their while to pay the double subscription.

Mr. *Snape.*

4295. Is there any inter-communication between the subscribers on the New Telephone Company in Manchester and your company?—There was not, sir. Of course, that competing company started; they got their list of subscribers; those subscribers could talk with each other. We had a much larger number of subscribers than they had; an immensely larger number of subscribers. There were some who, for reasons which I cannot pretend to understand, thought it worth their while to continue to pay our 10*l.*, and to pay the other people their 6*l.*

Mr. *Snape*—continued.

4296. But you have no arrangement by which without a subscription to each company the subscribers on the one can communicate with the subscribers on the other?—We had not as long as we were in competition, but when the competition came into a friendly form we allowed any gentleman being a subscriber on the new company, either at 6*l.* or at 5*l.*, to have communication with all our subscribers by paying 10*l.*, or the difference between his subscription and the 10*l.*; in fact, any of their subscribers can now, if they choose, become subscribers to the united system by paying 10*l.*

4297. And *vice versâ*, I suppose?—And *vice versâ.*

*Chairman.*

4298. That is to say, that while competition lasted, there were two bodies of subscribers to two independent telephone companies, neither of which could get on to the system of the other?—That is it.

4299. If the subscribers of the one company wanted to be put in communication with the subscribers of the other company they must join the two companies; is that so?—They must join the two companies.

4300. That was the system under the two companies?—That was the system under the two companies.

4301. As soon as the competition ceased and the amalgamation took place, an arrangement was entered into by which the subscribers on the one system had every advantage given to them to get into communication with the subscribers on the other system?—Yes; the number of the National Company's subscribers who were also New Company subscribers at the end of April 1895 was 492, paying to both companies. It was a larger number, but gradually a certain number of these gentlemen have accepted our proposition as to paying the difference between their subscription to the New Company and our 10*l.* They have the benefit of the whole system. By that means, and after wasting a great deal of capital, complicating the thing very much in a particular area, a combination ensues. I heard, 50 years ago pretty nearly, enunciated in a Committee of the House of Commons that competition must end in combination. Here is a case in point. It will be so.

Mr. *Benn.*

4302. Have you a similar table to this with regard to Dundee?—No, I have not Dundee. I can get it, I daresay. Would you like it?

4303. I think this is so very useful with regard to Manchester that a similar table with regard to Dundee would be specially instructive?—I will have a note made of it.

*Chairman.*

4304. Does that complete that point?—That is my little contribution, sir, to the "advantage of competition."

4305. But you would apply the experience of Manchester to other places?—Yes.

4306. Where the same results have followed from competition between different companies in the

*Chairman*—continued.

the same area?—Yes; it was the realisation of that state of things at Manchester which led, in London, to the absorption of the New Company. The moment the Duke of Marlborough realised the difference between fact and illusion, he saw that it was impossible to go on on the theory of a competition which involved these sort of consequences. Of course that happy change of mind was not arrived at until a vast amount of money had been thrown away.

Mr. *Snape.*

4307. Do you think that competition would have to end in combination if the municipalities were the competitors with your company?—Yes.

4308. Would you have to combine with them, or they with you?—If the municipalities, of course, worked irrespective of profit and loss, and could induce the ratepayers to pay the losses of a reckless competition, our position would be a little awkward; but I do not apprehend that that will come off. A combination of convenience probably would have to be arrived at upon some terms or other (I do not know what); but all I want to point out is that in this business it is so sensitive, it is so difficult; the convenience may be so extraordinarily interfered with by two people working in one place, that it ought to be avoided, if possible, at any cost. We have had some experience of it. We had great trouble in London, and our service was very much disorganised; we had a great many complaints through a company called the Globe Company, which had a license. They found it a very convenient practice indeed to go where our wires were. They could see where the line of the traffic was; they found out who the subscribers were (that was open to all the world), and they proceeded to erect a superstructure in London; their men were, of course, zealous, and had to put up their structure regardless of the convenience of other people; and this is an illustration of what ensued (*handing in some photographs*). Those are our lines, and there the interests involved led to their tying our lines up in lumps while the operation shown there was going on.

Sir *James Fergusson.*

4309. Did they do that at their own risk, or with your consent?—At their own risk.

*Chairman.*

4310. What was the result of that competition?—The result of that competition was that we got into such discredit with our people; it was bringing telephony into such absolute disgrace, that we bought them out.

Mr. *Benn.*

4311. I suppose you were both doing this sort of thing (*referring to photographs*). You were both on the same footing with regard to your trying to disfigure the heavens in this way?—Neither of us had any right.

4312. So you were both equally guilty of the monstrosity?—Yes, that is one of my complaints, that you and others complain of an inefficient service which depends for its efficiency upon

Mr. *Benn*—continued.

rights which you will not grant. You are the people to blame, not us. That is an abstract proposition; I do not mean the honourable Member, of course.

4313. If the municipality preferred to put all this underground, to destroy any chance of this sort of thing (*referring to photograph*), it would be a reasonable request, you think?—I do not know that it would be. I do not know that even underground you might not have the same thing arise, but we have not arrived at that Alsatian moment yet. You must have a good deal overhead notwithstanding.

*Chairman.*

4314. Is it your opinion that the inefficiency in this particular case, when the Globe Company, without the sanction of the local authority, or any right whatever, tied your wires up in this way, was directly the result of the competition which was going on?—One would scarcely like to put too plainly what one thinks was the object. I do not think the erection of their works absolutely required that, but perhaps the zeal of their servants outran their discretion.

4315. A possible desire to be bought up at a good price, you think, had something to say to it?—I fear that desire to be bought has a good deal to do with this telephone agitation.

Mr. *Benn.*

4316. Perhaps they had an idea of buying you up, Mr. Forbes; did not that occur to you?—They were not big enough.

4317. It is a question of size, and not of right?—Well, the County Council is big enough to buy, if they can get the power to do it.

*Chairman.*

4318. Are there any further points you would like to deal with?—I have a great many points, but I am almost afraid I shall tire the Committee. I should like to give some account of our progress in some of the Scotch cities (Glasgow and others) during the last five years. There are some figures I thought might be useful about Scotch towns, showing that we are not really at a standstill in progress in Scotland. (*A further table was handed in.*) There are six years shown upon the table, but it shows the progress in five years only in Glasgow, Edinburgh, Dundee, and Aberdeen. I do not know that I need enlarge upon it beyond showing that we are keeping pace with the demand. I have no doubt that if Glasgow is metallic circuited, the demand probably will be a little more prompt than it has been, because the service will be better no doubt; I could not undertake to say that it would be cheaper, but it would be better. Then, sir, there is the question of the number of complaints by subscribers; that has been presented to you in rather, I should be sorry to say, exaggerated terms; but it is just as well to know, as far as we can ascertain it, what it really does mean; and with that view we have had a careful return prepared, for which Mr. Gaine is responsible, but as to which I have taken the pains to ascertain that it is

*Chairman*—continued.

reasonably correct (*handing in a further document*). You will see what it is: Glasgow is one of the worst places; that is perhaps why there is such a conflict of evidence as between those who came on the one side and those who came on the other. There is no doubt that the "average number of complaints per exchange subscriber's line for the year ending 31st December 1894" (3·79) is not so favourable as Edinburgh, where it is 0·09 each subscriber. "The average number of exchange messages, local and trunk, per exchange subscriber's line for year ending 31st December 1894." In that table you will see that the number of complaints fluctuates enormously.

4319. Would these be complaints sent by letter. They would not be complaints at the exchange, would they?—Mostly by letter.

4320. Formal complaints at the office?—Formal complaints at the office, either by calls at the office or by letter. They amount, apparently, over the average of the United Kingdom (averages are sometimes good and sometimes bad) to ·73, less than one complaint a year per subscriber; of course in some places they are worse than others, and Glasgow, unhappily, seems to be the worst of all.

4321. London stands at less than 1 per cent. per subscriber?—London is ·94 per subscriber. Then, sir, you have got already a statement handed in by Mr. Preece of the charges in different places. We have got one prepared, I suppose from some other sources, which I will take the liberty of handing in, and it will reveal that although in some places, which have no analogy whatever with great cities, the rates are lower, in many other places they are much higher. It is to be taken for what it is worth. (*The document is handed in*).

4322. Those places being mainly in the United States?—Yes, there are a great number in the United States; Baltimore, and those places. Then there is Brussels, and there is one feature about Brussels which I should like to comment upon, that is, the State now have acquired nearly the whole of the telephones there. They attach so much value to the metallic circuit, as compared with the single wire, that they charge 50 per cent. extra for it; the subscribers can have the option of being served by a single wire for 10*l.* within a radius of three kilometres of the exchange, or 15*l.* on a metallic circuit.

4323. You are making no extra charge for the twin-wire service?—No.

Sir *James Fergusson.*

4324. Do you not in some places give the subscriber the option of having his single wire doubled by paying so much more?—Yes. I think when the Irish wire was laid we were anxious to facilitate the through trunking, and there we proposed if any subscriber thought it worth his while to have a metallic circuit for the long telephone, 2*l.* 10*s.* for special instruments; in fact, to make his local connection fit for long telephony.

4325. Is it not the case that in the large towns there is a certain extra charge made on conversion?—For conversion, yes; what we call a special trunk installation.

Sir *James Fergusson*—continued.

4326. I do not say it is not quite right?—Now, Amsterdam; I am a little familiar with that. Amsterdam and Rotterdam are two very important centres, and as I spent four years of my life a good deal in those two cities I know a good deal about them. There they are essentially a commercial community. I suppose for the size Amsterdam is a financial centre of great importance, and as a commercial centre it is of great importance. Rotterdam is less important financially, but quite as important commercially. I do not know any people who know better the value of a thing they buy or sell than the Dutch; in fact, they are reputed by Mr. Canning to have had some faults in that direction; but in comparing London or any of our great cities with Amsterdam, it stands thus: There the charge is 9*l.* 16*s.* 8*d.* for a kilometre, and anybody who has visited Amsterdam may know there are some outlying suburbs, such as Neuwer-Amstel and Ouder-Amstel, within a very moderate distance, where in one part it is 12*l.* 10*s.*, and in the other part it is 20*l.* 16*s.* Of course, one does not expect absolute accuracy in gentlemen giving evidence like Mr. Dickinson, but I was a little struck with what he said about Holland, that there the subscription was from 2*l.*, or something of that sort, upwards. There is no such subscription in Holland as 2*l.*; and that which I have stated is what the subscription is in the two most important centres.

*Chairman.*

4327. Varying from, I think you said, 9*l.* up to 20*l.*?—£. 9 16*s.* 8*d.* for one kilometre, and in the same city, in the outlying suburbs of the New Amstel and the Old Amstel, in one case 12*l.* 10*s.*, and in the other 20*l.* 16*s.*

Mr. *Snape.*

4328. £. 20 16*s.* for one kilometre?—No, these are areas outside the kilometre.

4329. From the central exchange, how many kilometres?—The space covered is about 30 square miles, while in London (I have heard it very often) it is 600 and something.

*Chairman.*

4330. Six hundred and thirty?—But if we compare like things with like, I cannot imagine myself anything more akin to London than a place like Amsterdam, as a comparison. It is a great commercial centre, and it is a great social centre; so is London.

4331. But the population is, of course, very much smaller?—Of course; but, still, the price per telephone is very much larger as regards some parts of it.

Mr. *Snape.*

4332. In whose hands is the telephone there?—That is very peculiar. The State have the monopoly of the telephone there. The telephone was determined to be a telegraph, and the State erected the trunk wires. It is carried on by Bell's Company, the commercial business. The State there anticipated the Post Office in this country

Mr. *Snape*—continued.

country by allowing a company to work what I may call, as an old carrier, the collection and delivery department; but they left the trunk line in the hands of the State; they took that into their own hands, but the companies work it. They hand over to the State 75 per cent. of the trunking.

4333. The trunk receipts?—The trunk receipts. They hand that over to the State, and they retain 25 per cent. for working. But what is peculiar about Amsterdam (and all the Dutch towns) is this: The State gave the concession to the company to telephone, but left them to find their way with every area; and the different corporations or municipalities have licensed this telephone company to carry on the business in their area; and that is an exclusive license. They found out that one was enough.

4334. The exclusive license is to the municipality in this small area, I understand?—No, the municipality license the telephone company in their area.

*Chairman.*

4335. As I understand, the State has no monopoly?—Oh, yes; the State have the monopoly.

4336. Then how is it the municipality license the company?—They license the company as regards the area in which they can carry on the business.

4337. They do not license the persons, but only the area in which they may carry on the business?—That is so.

*Chairman*—continued.

4338. They authorise the company to carry on the business in their municipal area?—The State license the company, but the company have to go to the municipalities to obtain their license to work in their area; and the municipalities elected to license them with an exclusive license. That is going on in Holland.

Mr. *Tully.*

4339. Have the company to pay anything to the municipality for this license?—I can tell the honourable Member very shortly, for I have the whole story in their own book here.

Mr. *Snape.*

4340. Can you tell us what the scale of charge is that is made by the company for the use of the trunk lines?—If you will allow me I can tell you, because I have it in their book, but I am afraid that involves a little research.

*Chairman.*

4341. The tariff for three minutes' conversation over the trunk lines is uniformly 50 cents?—That is 10*d.*

4342. For three minutes, or part of three minutes?—Yes.

Mr. *Snape.*

4343. That is in Amsterdam?—All over Holland.

4344. And the same company, all over?—The same company, all over.

*Friday, 24th May* 1895.

MEMBERS PRESENT:

Captain Bagot.
Mr. Baird.
Mr. Benn.
Sir Charles Cameron.
Sir James Fergusson.
Sir John Gorst.
Mr. Grant Lawson.
Mr. Arnold Morley.
Mr. Snape.
Lord Stanley.
Mr. Tully.

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Mr. JAMES STAATS FORBES, again called in; and further Examined.

*Chairman.*

4345. I THINK when you were giving evidence on the last occasion you were giving some particulars showing the progress made in Scotland especially, and in other parts of the country, and you were dealing with the question of complaints?—Yes, sir.

4346. Have you any further evidence on that point to give to the Committee?—Yes, I rather wish to put in some other statistics. I think we exhausted the price question; and the other ground of complaint was the inefficiency of the service and the great cause for complaint, and I have some papers bearing upon that which I should like to submit to the Committee. "No. 8," sir, is a paper I will put in, in order to test the reasonable truth of the assertion that this is a very bad service, and that people are kept waiting, and so forth. This is a statistic which shows the number of "local messages (exclusive of trunk messages) for one day (3rd April 1895) passing through the exchanges at Glasgow, Aberdeen, and Edinburgh." The material point there is to bear in mind that all these exchanges must be subject to a common user, and that the subscribers to an exchange cannot be in the same happy position as one in possession of a private wire, which is there at his service unencumbered with any common user. When he calls, his being a private wire, there being no other call upon the private wire, of course he is answered rapidly. Subject to that, this is what takes place: "Time occupied in placing subscribers into effective communication" (very often the first call upon a subscriber himself does not bring him; that involves a further call, therefore effective communication is the factor). Under half a minute, 59,020; under one minute, 4,590; under one and a-half minutes. 974; under two minutes, 698; under two and a-half minutes, 260; under three minutes, 572; under three and a-half minutes, 54; under four minutes, 326; under four and a-half minutes, 218; and five minutes and over, 2,694. Now, as in some sense a defendant in this cause, I claim that that, under the circumstances, disposes of the accusation that this is an intolerable service, and that people cannot use it. "Aberdeen." Under half a minute, 14,050; under one minute, 490; under one minute and a-half, 394; under three minutes, 66; under five minutes, 54. "Edinburgh." Under half a minute, 12,130; under one minute, 1,956; under one and a-half minutes 1,298; and so on down to the end of the table. That is, as regards the complaints in Scotland. "London." (That was taken in a different fashion): "Number of messages dealt with by one operator in charge of fifty subscribers during seven hours (10 a.m. to 5 p.m.) on the 3rd of April, 1895." You see that lady conducted 508 operations. Under half a minute, 176; under one minute, 146; under one minute and a half, 116; and then they tail down in some proportions to five minutes and above. That I put in as information for the Committee. (*The document is handed in.*)

*Chairman*—continued.

4347. Could you give us the number of subscribers at Glasgow, Aberdeen, and Edinburgh?—Yes; 5,221, Glasgow.

Sir *Charles Cameron.*

4348. Is that in the town, or what does that include?—That is in the Glasgow Exchange area; and Edinburgh, 1,741; and Aberdeen, 1,029; and in London, 10,848.

*Chairman.*

4349. Then may we take it that on this day in Glasgow 5,221 subscribers used the telephone 69,000 odd times?—Yes.

4350. And the same with regard to Aberdeen and Edinburgh?—The same. That was the number of calls in the day.

4351. Showing a very considerable user of the telephone by the subscribers in each place?—Yes.

Mr. *Grant Lawson.*

4352. It is the number of messages, I think you say?—Messages.

4353. I take

*Chairman.*

4353. I take it, you mean the number of calls by subscribers?—Effective calls. The number of messages is 69,000. Those are the number of messages that passed as a consequence of that call. That is the question and answer.

4354. In each case two people are brought into communication and carry on a conversation?—Yes, representing those messages, 69,000.

4355. Fifty-nine thousand under the half minute?—Yes, an effective call means a call which results in the person called being able to speak with the person calling; that makes two messages.

4356. Just to make it quite right on the notes: the 69,000 odd in Glasgow mean that 69,000 people have been put into communication, but there would be only half that number of actual calls by people wanting to be put into communication?—Yes, that is so. Then, sir, "No. 9" I will put in, a "Return of local messages through a few important exchanges on the company's system." (*The document is handed in.*) That is a return bearing materially upon the user, and the occupation by users, of the wires and the cost per occupation; rather an interesting table.

4357. Have these anything to do with trunk messages?—Local; those are exclusive of trunk. You will find that stated in the second column. The first is, "No. of exchange subscribers." Then, "No. of local messages per day (including Sundays) exclusive of trunk messages"; "Average number of local messages per day (including Sundays), per exchange subscribers line. Exclusive of trunk messages"; and the "cost to subscribers per message." Lime-street Exchange, London. ("The number of messages is based upon a return of the calls for the week ending 28th March, 1895, and dividing the total number by seven, the Sunday is therefore included"); number of subscribers, 2,135; number of local messages per day (including Sundays), exclusive of trunk messages, 22,625; average number of local messages per day (including Sundays), per exchange subscribers line. Exclusive of trunk messages, 11; cost to subscribers per message, 1.04*d.*

Mr. *Benn.*

4358. Could you at this stage give us the number of trunk messages, so that we may here compare the local service with the trunk service?—No, I cannot do that just now. Of course, we can furnish it, but their number is insignificant in comparison. Central Exchange (Birmingham), number of exchange subscribers, 1,388; number of local messages per day (including Sundays), exclusive of trunk messages, 16,463; average number of local messages per day (including Sundays), per exchange subscribers line, exclusive of trunk messages, 12; cost to subscribers per message, 0.53 of a penny. Blackburn, 558; 6,194; 11; 0.51 of a penny.

*Chairman.*

4359. I do not think it is worth while reading them; we have the figures before us. It is a useful table, but I do not think it is necessary for you to read the whole of the figures?—



*Chairman*—continued.

What I want to emphasize is the extraordinary user at any particular place. Leeds, for instance; there you see there are 40,000 messages, an average of 26 per day, at a price of under a farthing; Liverpool (a very important one), 96,000 messages, 25 per day average, cost ·25 of a penny; Manchester, 70,000. That bears upon the question of user, taken in connection with the figures I have given you about the efficiency of the call. Taken in connection with the price, it hardly bears out the pretty strong assertions as to the dearness and want of efficiency of the system.

4360. How do you account for the fact that in London it is, I think, more than double, or very nearly double, the highest figure at other towns; is it because it is so much less used?—There are only 11 messages in London, compared with 25 in Liverpool. The telephone in London has not become so essential a part of the commercial machinery as in Liverpool, or Manchester, or Leeds.

4361. And is it also due to the fact that in London (in the city) the charge is higher?—No doubt the charge is higher in London.

4362. The annual charge?—Yes.

Mr. *Benn.*

4363. Do we understand that the greater the business done the less the charge?—The figures point to that; that is to say, the more the capacity of the machine existing is worked up to, the less the charge.

*Chairman.*

4364. The less the charge per message?—The less the cost. The greater the user for a fixed sum, the less the cost per user.

4365. I will put it in this way; that if there are two subscribers paying the same annual amount, and the one subscriber uses his instrument much more frequently than the other, naturally he is charged less per message than the man who uses it less frequently?—Naturally the division of the number of messages he sends into the price is the proportionate sum each pays per message. One man would pay, of course, these averages. It shows that in Liverpool and Manchester some people, who use it more largely than others, must have got it at less than the average a great deal; but it is on the whole of the user (the whole 96,000, or 40,000, or whatever the figures are) of messages; those who use it most get it cheapest.

4366. And the figure in the last column is the average price in each place of each message?—Each message taken over the whole; therefore, it is obvious that somebody at Liverpool, Manchester, and the other big places must have had their messages carried at something very much less than a farthing.

4367. Are these taken as fair average specimens of the various towns in the country?—Yes, with a view to testing for our own information, and (I was going to say "for the instruction of," but I will say) to submit to, the Committee, as near as we can ascertain, the facts, as against the statements that have been made here.

4368. And are they fair specimens of the general state of circumstances over the country

*Chairman*—continued.

where the National Telephone Company provide a service?—I present them to you, sir, in that form as being fair records of what goes on from day to day.

4369. Is Glasgow included?—Yes. "Royal Exchange (Glasgow) 3,169, 39,957, 13." You see the use in Glasgow is much less than it is in Liverpool or Manchester.

4370. And it costs just over a halfpenny a message?—It is over a halfpenny there. Then, sir, I think I will put in this paper. (*The paper was handed in.*) It bears out from another source, and in another form, what I stated the other day as to the possible effect of telephoning on more or less perfect telegraphing. You will remember I stated out of the German "Statistik" that in Great Britain there was a very much greater average of telegraphing to the population than in any other country, four or five times as much as in Sweden, for instance. This is taken from the "Journal Telegraphique," which is a well-known paper amongst telephonists. They show there in another form the same thing. The "Grand Total of Telegrams," that is, of course, derived from an official source open to everybody, the "Population," and "Telegrams per head" of the population. There you see (taking Sweden as one of the model places as a telephone country, and Switzerland) ·435 for Sweden; England, 1·902; therefore there are, in round numbers, five times as large an average of telegrams to the population in Sweden as in England. That may be useful.

Sir *Charles Cameron.*

4371. You mentioned Switzerland just now?—Switzerland, if you have got the return, you will see is 1·315.

*Chairman.*

4372. I understand you to suggest that the larger user of the telegraph probably indicates a more effective telegraph service, and, therefore, a probable less demand for telephone service?—Yes. That proposition is very simple. We are asked: How is it that in Berlin there are so many more telephonic subscribers than in London? How is it that in Stockholm there are so many more? We try to find the cause. If the telephone in one country bears a much larger proportionate valuable means of accommodation than some other, probably it means that it will expand more rapidly. I have no doubt that our telephone expansion in England, amongst other causes, has been kept where it is by the extreme goodness of the telegraphic service.

Sir *Charles Cameron.*

4373. Could you tell us whether the telegrams mentioned here include what are called telegrams in France and, I think, in Germany: messages sent by pneumatic tube?—Whatever passes as a telegram or telegraph; how it is sent we do not inquire. A good deal of ours is done here in a pneumatic tube. These are taken from the statement of the "Journal Telegraphique," and they give the grand total of telegrams. They do not tell us how they transmit those.

Mr. *Benn.*

4374. On that point, if I may interrupt, the question of the relation of the telegraph service to the telephone; do not your figures go to show that the larger use of the telephone on the Continent is not so much an evidence that the telegraph service is unsatisfactory, but that the telephone service is cheaper and more satisfactory?—No, I do not see that it does that. First of all, I am not at all sure that your *premise* is right, that the service on the Continent is larger. However, I have got some tables which will show what it really is.

4375. Do you wish us to understand that it is the efficiency of the telegraph service in this country which causes the telephone to be so little used?—Of course, one has to deduct upon ordinary common sense principles that if you have an extremely efficient telegram service and an extremely efficient telephone service in one case, and an extremely inefficient telephone service against an extremely efficient telegram service, the result would be that the telephone would not advance against the telegraph; and the reverse. The telephone service would present great inducements to the user if he was not already well served by the telegram.

*Chairman.*

4376. Would you apply the same argument to the system which has, I suppose, extended more in this country than, certainly, in any other European country, of express messages and commissionaires, and other means of conveying messages which are provided for the public by the Post Office or private companies?—Yes, sir, and happily under the agreement the telephone company will have the benefit of it; but up to this time the telephone, as compared with the telegraph, has not had those great additional facilities. Mr. Preece handed in a very interesting table which really seems to bring this down into the region of comparison. This document which I hold in my hand is a statement showing the number of lines and the population at various centres at the 1st January 1895. (*The table was handed in.*) I thought it was worth while to see what were the facts, the telephone having developed so enormously in America, where it is quite notorious that it is the work of a private corporation. We know that it is dear compared with ours. That is already in evidence; but it was assumed that, being dear, it was also much more available for the population. Therefore, sir, we have treated it as being useful to everybody interested in this question, especially the Committee, to ascertain the relative number of lines, the population of various centres at the 31 December 1894, and the population per line. Glasgow has 5,221 lines, 565,839 population, population per line 108. You see what the comparison is, 108, as against New York 145, so that every 108 people in Glasgow have telephonic facility as compared with every 145 in New York.

4376A. Where do we find this?—On Mr. Preece's table, you find the latter figure. Perhaps you will allow me to read these in comparison. I think the next one is Chicago. Chicago is much better off than New York; I think it is 101. I will read in comparison with that

*Chairman*—continued.

that list you have before you what the facts are in Scotland. In Edinburgh there are 1,741 lines, 329,932 population, and population per line 189; in Dundee 1,291 lines, 153,308 population, and 118 population per line; and so, without repeating the number of wires and the number of population, I will go down the table to show in the various centres what number of lines there are to the population, or rather what the population is to the lines.

4377. Perhaps you will take one or two special instances, because we have the figures before us?—Greenock, 100; Aberdeen, 118; Galashiels, 49 (a very small number of subscribers who seem to be extremely well accommodated, every forty-ninth has telephonic facilities), Dumfries, 89, and so on; but the average in all Scotland is 127, or, rather, in those towns of Scotland that you find on the table.

4378. Do those include all the main telephonic centres in Scotland?—Yes, all the chief cities in Scotland; Glasgow, Edinburgh, Dundee, Perth, Montrose, Aberdeen, Greenock, Galashiels, Paisley, Kilmarnock, Kirkcaldy, Dumbarton, Hamilton (the coal district), and so forth, and the pleasure place "Oban" has one to 40. In Ireland it follows almost by induction from one's everyday knowledge that the population per line would not be so well served: it is 244 for Ireland; Belfast, 261; Londonderry, 329; Dublin, 239; Cork, 190; Limerick, 239; an average of 244. Then come the great centres of England and Wales. First, you come to the "Northern Province." There you get the same thing. "Population per line": Newcastle, 257; Sunderland, 260; Middlesboro', 257; West Hartlepool, 123 (there seems to be some exciting cause there for telephone user); Durham 263; Hull, 257; York, 455 (well, York is one place and West Hartlepool is another. Without any figures one imagines that in a place like York there would be less telephonic communication than in a place like West Hartlepool); Leeds, 156; Goole, 514; they vary enormously, but compare very favourably with the great American cities. Then in the "north-western province," Liverpool, one in 119; Birkenhead, one in 131; Manchester, one in 147, and so one; Blackburn, Burnley (which are low), Lancaster, 154; and so on through varying figures. But the chief places of commerce (shipping, and so forth), manufacture, will bear a very favourable comparison with similar places in America. Therefore that would seem to indicate that after all, with all the drawbacks and shorter life, great limitations of the power to develop the telephone under the legislation, which, of course, we were bound to obey, we have not made so poor an advance as it is asserted we have. Then you come to another group, the "midland province"; and then you come to the "southern province," and then you come to "London"; and London, I think, is almost the worst in respect of the population per line, or to put it the other way, to the telephoning to the population; it is worse than Canterbury, and Canterbury is a sleepy place, so that there must be some reason why it is so bad in London, and it is the object



*Chairman*—continued.

of these figures and of this inquiry to find out why London is so behind. Now statement "No. 12." This shows "the number of subscribers on the Metropolitan Exchanges having a limited local service, and the number of subscribers on the same exchanges having full Metropolitan service." (*The table was handed in.*) This is rather an important question when you come to administration. We have learned in this business that unity and simplification are two great essentials. We have to deal with millions of operations; we therefore want unity and simplicity; and amongst other things in which it is desirable to have unity and simplicity is the question of tariff; whether in fact you may have one uniform moderate tariff in an extensive area which, in the result, on the average, works out at an extremely low figure for the service rendered, or whether you should have a series of concentric circles where the rates vary with every half, quarter, or some other fraction of a mile. Well, that is possible; but in practice it would be found extremely inconvenient. Of course, if the initial figure of subscription were exorbitant and extravagant, there might be some use in considering whether a limited service might not be desirable at a lower rate; but even taking London (or take the whole Kingdom), sixpence a day, or something under a half-penny a message, is what it amounts to. Well, that seems to me to be secured by the extreme moderation of the initial charge for every area. How does it work out if you try it? Of course, we try experiments from time to time to see what results. We argue amongst ourselves as to whether this, that, or the other is the best way. Well, that is talking about it. Then we set to work to see, without prejudicing the general question, whether we can find out the right thing to do. In London, some people said: What an extravagant subscription this is, 15*l.*, 20*l.*, or whatever it is. Cannot we have a subscription which will limit the user; a house-to-house subscription; or: Cannot we have a subscription for our own local area. "All London" is a very fine phrase, but we are not mixed up in our association with all London; we want something for ourselves in our own neighbourhood. We tried both those things, and with this result: we have a local service at Croydon. Croydon is a populous place: a busy place; it has got elements of trade, and it is a busy place; it has a great number of residents within its borders and outside; and although we have by canvassing, by pointing out to the people the great advantages of this local subscription (which means a free speaking in the area of Croydon between Sydenham, Bromley, Redhill, Epsom, and Streatham) managed to get 61 subscribers for that limited service in that area at 10*l.*, whereas in the same area we have 250 subscribers on the exchange at Croydon who pay the London price. Living there, or having relations in Croydon, they prefer to pay that additional subscription.

4379. I understand that 250 subscribers pay the full rate and have the right to speak over the whole Metropolitan area?—Over the whole area.

4380. These local subscribers, the 61?—Are limited.

*Chairman*—continued.

4381. They pay 10*l.* a year for the limited service?—Yes.

4382. And how much do they pay if they want to communicate with other subscribers in the other portions of the metropolitan area?—If there be a fee they have to pay the fee; they use the call office then, and they have to pay a fee of 3*d.* a message.

Mr. *Benn.*

4383. Of course, in Croydon the telephone is mainly used by business men, city men, who desire to communicate with the Metropolis; that is what this means, I suppose?—Yes; and it means another thing, as to which, I think, some questions were rather harped upon; that is, that because a man's address in the city is given he is looked upon as a city subscriber. The fact of his being a city subscriber means that he finds not only the advantage of the city intercommunication, but he lives somewhere in the London area, and that, quite as much as the city user, induces him to become a subscriber.

4384. Of course, Croydon is not in the London area?—Oh, yes, it is.

4385. It is outside the county of London, as we understand it?—I am talking of larger London in our sense.

Mr. *Grant Lawson.*

4386. He could not be supplied by municipal London?—Not at all. Now, "Kensington"; we were pressed a long time ago to have a local exchange at Kensington. There, at 10*l.* per annum, we have three subscribers; and the people who live in Kensington area (the area of the Kensington exchange), who subscribe to the metropolitan service, is 342. "Kingston, including Richmond and Wimbledon"; well, we had lots of representations, lots of grumbling about the necessity of paying a London subscription to be provided in Kingston and those neighbourhoods with these telephones; we said: "We will have a local exchange at 10*l.*" That is the result of it, two subscribers; whereas at Kingston, 36 people live who pay the metropolitan subscription. "Battersea," one; well, Battersea is a growing place, but Battersea is a very good illustration, and it seems to me very much to explode the fallacy of this being a working man's necessity. Battersea is the working man's paradise, and we have managed to get one subscriber for 10*l.* It is not a working man's necessity the least in the world, and anybody who founds upon it will be disappointed; there is a very good practical illustration.

Mr. *Benn.*

4387. Do you think many working men would pay the 10*l.*?—I do not think any working man, not one in a hundred thousand, would ever use the telephone. They do not use the telegraph to any particular extent; it is not a necessity of the working man.

Mr. *Snape.*

4388. Do you think many working men travel first-class by railway?—No.

4389. Then do not you think this may be a question of cost?—Not the least.

Mr. *Snape*—continued.

4390. You think, then, the working man would have no appreciation of the telephone if he could get it at a price within his means?—I do not think the necessities of the working man would involve the use of the telephone once in the year. The necessities of the working man in London do involve his travelling by tram or railway; and I suppose that is the apology for the trams being taken over by the county council. That is a real necessity and a real benefit; but what is a working man to do with the telephone?

4391. Would a small tradesman, a small shopkeeper, use it if it were within his means?—Yes; that is coming nearer home. Now, then, is it worth the while of a small tradesman to subscribe for a thing of which he can have the reasonable use day and night for 6*d.* a day? What is 6*d.* a day to a small shopkeeper whose trade is big enough to induce him to telephone to keep his customers together? It is covered by 6*d.* a day, or something of that sort.

Mr. *Benn.*

4392. That is not the London tariff, is it?—It is a little more in London; suppose it is 1*s.*?

4393. Twice that?—No, it is not twice that.

*Chairman.*

4394. Sixpence a day would be, roughly speaking, the price of this local service, which is given in these localities at 10*l.* a year?—Yes.

4395. And that is a kind of service, I think, that General Webber recommended?—Yes.

4396. Local district exchanges scattered all over London?—Chimerical! impossible! That is impossible.

Sir *James Fergusson.*

4397. If the system of call offices, with all the facilities under the agreement, comes into play, it will then be seen whether the working classes use it, as they will only have to pay for the separate message?—They now can use it for 3*d.*; the working man does not want to subscribe; the local working man, or any other man,—the richest man in the neighbourhood—if he chooses can go to a call office and use the telephone. If he wants to telephone once a week or once a day he can do it.

Mr. *Snape.*

4398. Would the call office be of service if the people to whom he wished to speak were not on the telephone at the other end?—No, of course.

Sir *James Fergusson.*

4399. Except that he can have his message written down and delivered now, can he not?—Now he can. Of course when that arises we shall have some of those advantages which have made telephoning more popular and more expensive abroad than in this country. We have 138 call offices now open in London. We are on the agreement, I understand, and what the agreement really is intended to do. That is what it will do. It will certainly encourage the multiplication of call offices; it will certainly encourage telephoning, and, I suppose, increase the subscribers to the exchanges, and then the working man,

Sir *James Fergusson*—continued.

man, or any other man who chooses to rely upon a call office at a fee rather than become a subscriber, will find from year to year that the 3*d.* remains, but that the number of people he can call from any particular office will increase. The thing will work its own way.

*Chairman.*

4400. These are results which you think will accrue from the agreement?—Yes.

4401. But the agreement not being operative yet you have had no actual experience of it?—No, I have no doubt that will ensue. Now, another thing, private houses. There are a great number of people connected with London, professional men and others, whose necessities are not so great that they think it worth while to pay the full rate (I may tell the honourable Member that the average rate in London is about 14*l.* 10*s.*), and therefore we give, to anybody who chooses to take it, what we call a private-house connection in the metropolis; that is to say, he pays 10*l.* Of those we have 492. "Private house," no doubt, means that a man may speak from his private house to anybody on the exchange; but the same man, if he has an office in the City, cannot speak from that private house on his city business; therefore he has an option. Take the case of men at Westminster: lawyers, engineers, men of that class; they live in and they have their work about London. If they think it worth while to take the London subscription they can use the instrument at their office to talk all over London; but if they think their necessities are served by their telephone at their house they can only use that for domestic purposes. We have 492 of those out of this very large number of subscribers in London; so that it really shows that universality of user coupled with moderation of cost is the policy to pursue; and if you split it up into too many categories, you not only greatly embarrass the administration, but you do not succeed in the object in view. We have got to persuade the public that on the bare facts telephony is so extremely cheap and so relatively efficient that they had much better subscribe for the whole area.

Mr. *Snape.*

4402. How many of these 492 private houses are those of business people who subscribe for their office or business premises?—If you wish to have the particulars we will have it analysed

4403. I wish to know how far private persons not in business use the telephone; how many private houses?—We will get out the thing. I expect you will find that a good many of those people who use these are solicitors, Parliamentary agents; people at Westminster and in the City, who when they are at their particular business have no great urgent call in their business for telephoning; in fact, I know some solicitors in London who will not have it in their office at all. I do not think they are very wise, but they will not. No doubt those may be gentlemen who dine at a club occasionally, *haute* London; they may find it worth while to subscribe 10*l.* a year in order to explain why they do not come home to dinner. I dare-



Mr. *Snape*—continued.

say there are a certain number of those. I will have it analysed, sir; you shall see the addresses.

4404. The analysis, if made, you think will show such a result. If that be so, it is obvious that there are not many householders who, for the sake of their household and social arrangements, use the telephone?—No. I tried to explain at the last meeting that one of the chief uses (I am speaking now of my own experience) of the telephone when you understand it is the advantage of communication with your tradespeople without the necessity of going yourself to them.

4405. And you have very few householders who take advantage of that?—Because they have not learned it.

4406. Is it not rather because the charge is too high?—No; 6*d.* a day cannot be too high.

Mr. *Tully.*

4407. Would it be because the system was inefficient that the people do not use it?—No. Of course, "inefficient" is a term. I am not pretending, I never have pretended, that this is the perfection of a service, but the figures I have given to-day about the calls show what it really is. No doubt from time to time people are irritated by what appears an unusual delay; in fact, when you are waiting at the telephone it is irritating; I have in my own experience, being rather a hasty man, discovered that a second's delay means a minute, and my temper, my expletives, and so forth, are greatly aroused. In my cooler moments, when I calculate and think a little, I cannot complain about being kept sometimes for five minutes, and even 10. You must take it for what it is worth; but that is an illusion; people think that the telephone must be at their instant command; they forget the common user. I do not know whether anybody is going to give you any information about Germany; but there, with their perfection, you will find that people have to take their turn; they have to wait; they are disciplined to wait. But then the Germans are disciplined; we are not.

*Chairman.*

4408. Do you think the people of this country are rather spoiled by the excellence and rapidity of the telegraph service, where there is practically no waiting?—That is one thing; and, as regards the commissariat of London (as I said last time), there is no city in the world so little dependent upon telegraph or telephone for their supplies. Your tradesman sends to you for orders; he executes the orders at your own house; whereas in Berlin and in Paris the whole social thing is different: you must go and seek what you want. However, whatever the cause is, we have a great and growing number of people who will pay the full subscription for the general user of London, and a very limited number who will pay the less amount of money for the use of it; and a mere fraction of people who will use the thing with the local limitation, at a price like 10*l.*, or any price at all.

4409. What is the next point?—Rather a tender one, sir. I think I had better pass it over at present. It is a comparative statement

*Chairman*—continued.

of the Post Office and the National Telephone Company's subscribers in the country.

4410. I do not know why you should pass it over, if you have got any information which you think would be of value to the Committee?—Well, sir, as a servant of the Post Office, it is not a very grateful task to draw comparisons, and perhaps when I do draw them they are not worth much; but this is the list (*handing in the document*).

4411. Is that the Paper which I have here?—It is. The number of the subscribers on the two systems, showing what progress we have respectively made in the Post Office and in the Telephone Company; and perhaps I may spare myself (if I may so say) the embarrassment of dwelling upon it. I will simply hand it in, and honourable Members can draw their own conclusions.

Mr. *Tully.*

4412. Does that mean that the Post Office is behind the Telephone Company?—If you discuss, as you probably will do, whether these achievements of the telephone and the enormous advantage of the telephone is to be brought most rapidly and most efficiently in aid of the wants of the general community, it becomes material to see under which "ring" that object is likely to be most rapidly developed and most efficient. That is the use of it.

4413. Does that table show that the Telephone Company are more efficient than the Post Office?—It shows that they have made much greater progress; but I am bound to say, the Post Office have not acted in the sense, I suppose, of competitors; they have done the service in their own fashion in the places where they were established when we began; but the fact remains, that they have been more or less stationary, and that we are the people who have made the advance.

4414. The Post Office could not give telephones for nothing to subscribers, as it was alleged the National Telephone Company did in Plymouth?—I will not criticise what the Post Office do; but that was a Plymouth thing, I know, and it produced an awkward impression upon the honourable Member at the moment; but it was a very small matter, and was not a common method of procedure. I do not defend it; it was done by a small local company over which we had at that time no kind of control.

*Chairman.*

4415. It is the fact, is it not, that the Post Office telephones are only in a very limited number of places—not in the principal commercial cities of the United Kingdom—and that the Post Office has abstained from canvassing for subscribers, and has therefore been at a great disadvantage as compared with the company?—Yes, quite true. Now, the next disposes, sir, of rather a tender point, the question of the pledges made by the New Telephone Company to a certain number of people who signed some instrument or agreement as to the service of London by the New Company at a certain price. I do not know whether that is to be gone into, but if it be, I shall have a great deal to say about it; but this

*Chairman*—continued.

was a specific complaint that faith had been broken with the subscribers under this agreement, to a possible new telephone company. (*The document was handed in.*) The principal people connected with that agitation were Mr. Hastie, a solicitor of Lincoln's Inn, and a Mr. Haig; and this is the letter which was printed in the "Times" which explains: "Sir,—We hope that you will allow us to inform the telephone users of London, through the medium of your journal, that, as the direct result of the pressure brought to bear upon the National Telephone Company by the Association for the Protection of Telephone Subscribers, the prices of private house telephones in London, giving communication over the whole metropolitan area, will be almost immediately reduced from 20*l.* a year to 10*l.* a year, subject only to the condition that they are taken upon a five years' contract. The price of business telephones will remain as at present, but since the National Company have promised immediately to instal the twin-wire system, which will make speaking on the telephone clear and easy, the chief objection to entering upon five years' contracts for business telephones, and taking the discount of 3*l.* per annum then allowed, vanishes. Had the New Telephone Company continued to have an independent existence, our association had great hopes of obtaining an even better telephone service than has now been secured to users; but, on the other hand, it must be remembered that these benefits would have been seriously discounted by the fact that it would have been two or three years before the New Telephone Company would have been in full working order, while the present advantages will be secured immediately." Now, that was the conclusion at which the representatives of that body of subscribers arrived, and discharged the National Telephone Company and the New Telephone Company of whatever legal consequences attach to that agreement.

Mr. *Benn.*

4416. There is nothing in that to indicate that if the New Telephone Company had continued, it would have failed to carry out its financial promises with regard to rate of subscription and service?—No; but the gentleman whose name is second there (Mr. Hastie of Lincoln's Inn Fields) is not a man who would have taken a mere assurance about probability; he had satisfied himself as we all had. I cannot call the dead before you, but the Duke of Marlborough himself, when we came to sit down and go into the matter, altered his views. I am responsible for that circular; my name is on it. It made certain pledges, and when we made them we believed the possibility of them; but when we sat down to examine the question, not from their point of view but ours, we convinced them that their scheme was impossible; and with that conviction these gentlemen were persuaded by the same reasoning and arguments as those which led to the New Telephone Company disappearing.

4417. My point was this: that with regard to this letter, dated the 20th of March 1893, by which time you had acquired the New Telephone Company,

Mr. *Benn*—continued.

Company, this was a public declaration of the close of the transaction?—Yes.

4418. There is no indication whatever that the pledges given in the prospectus of the New Telephone Company were other than genuine and *bonâ fide*?—I think they were genuine and *bonâ fide*.

4419. Thank you?—And I think we have gone a long way to realise them.

Sir *Charles Cameron.*

4420. You mentioned that Mr. Hastie had carefully gone into this, and verified the statement for himself. Is Mr. Haig of Mr. Hastie's opinion?—Yes, I fancy so; I have no doubt he is. Mr. Haig is not a lawyer, but his name indicates rather common sense and acuteness, and he was equally satisfied.

Mr. *Snape.*

4421. In this statement you pledge yourself to the New Telephone Company to remodel the London system upon the metallic circuit system which you are pushing forward; can you say when that will be completed?—By the end of this year, sir. The object of the New Telephone Company was to metallic-circuit London, to put it shortly, and at a moderate rate, a less rate than we we were charging. I think they talked about 12*l.* The result of the negotiation between the New Telephone Company and the National Company was to satisfy the Duke of Marlborough (who was extremely able, and an enthusiast, and who hit the weak points of this thing in London) that it could be done without the enormous waste of capital equally well by the National Company, and what the National Company have done is this: They have ensured what he went for principally (the metallic circuit for London); it ensured what he went for, secondly, a reduction in the price. It is not 20*l.* now; it is 14*l.* some odd shillings.

*Chairman.*

4422. On the average?—On the average. In London we have spent 200,000*l.* (or we shall have spent it ultimately) in metallic-circuiting London as the result of that fusion with the New Telephone Company.

Mr. *Snape.*

4423. Is the House of Commons telephoned on that principle?—Yes, I am told it is.

4424. Then it is not very effective?—I suppose that would depend upon what parts of London you were telephoning to. There must be a blot in the system until all of it is done; and, no doubt, in the neighbourhood of Regent-street (that exchange, the Pelican Club that was, we are putting it to a much better use as a telephone centre) there is disturbance, because there is an entirely new system of metallic circuit boards going on, and this part of London is most affected by the eccentricities of the single-wire system that we have at present; that will all be completed this year.

4425. Therefore, whether a message be sent to one exchange, or to another exchange, the sound will be perfect after that?—Yes. I am



Mr. *Snape*—continued.

afraid I have troubled you with a great many papers, but they will be extremely useful to any honourable Member or any gentleman interested in this question when he comes to sit down to study it. I am going now to a question that I think I must say a few words upon, and that is the value of estimates.

*Chairman.*

4426. Are you now referring to the estimates that have been put in on behalf of the London County Council?—Yes; and before I proceed to that, sir, I should like, if I could, to impress upon the Committee a point which I think is not generally borne in mind in these questions when they are discussed, and that is the enormous waste that goes on. I will try to illustrate it in this way——

4427. Is this a new paper?—Yes. (*The document is handed in*). The number of new subscribers to the company's system during the year ending 31st December 1894 was 12,502. That is the additions of new people. But when you come to look at the progressive growth of the company you find that 12,500 is not the figure; it is diminished by the number of subscribers who, during the year, go off the telephone. Now, as to the gentlemen who dealt with those estimates, I am quite certain that is a thing they had never considered at all, that those 4,410 people went off, which involved an enormous sum of money in waste, gone for ever. And that is a very material thing, when you are dealing either with the capital expenditure or with the price per subscriber. What amount of waste is there? You see there are 4,000 people, 4,410, out of 12,502, go off. This is what takes place: A man subscribes for a year, or two years; he goes out of business; he moves; he ceases to be a partner; things are bad; and this telephone system in London has been extremely influenced by the state of things in London during the last four or five years, because no place has suffered at all in the same proportion as London. An enormous number of people engaged in financial business in the City, who are, so to speak, out of work, have disappeared in tribes, financiers, brokers, brokers' clerks, and people of that sort, during the last five, six, or seven years. Every man who goes off the telephone leaves you with this item of "labour," which, as I have already said, forms an extraordinary element in our calculation, 80 per cent. in round numbers, but I will put it at 75 (it is easier), 75 per cent. of the cost of a great deal of our business is labour. Now, what ensues when a man joins a telephone? You have to connect him with your machinery from the exchange with a wire; that wire is laid into a house. At the end of the wire the instruments are fixed and prepared; the cost of the labour in that operation is 75 per cent. of the material. Now, the man has been on a year or two years, we will say; he gives you notice to quit; you have the salvage in the value of the instrument and in the value of such portion of the wire as remains for application to another subscriber; but you have lost all the labour on it, because it costs just about the same to take it out as it did to put it

*Chairman*—continued.

in; and then in respect to the instruments that you have taken out and the wire and so forth, it costs just as much to transfer it to another floor or to another house. In that element you have an absolute loss of a large portion of the subscription, waste again.

4428. Or rather of the capital sum expended in putting it in?—Yes.

4429. What proportion of that capital sum, do you say, is represented by labour?—Seventy-five per cent., if you take all the elements of it.

4430. And what on the average do you consider the cost of putting an instrument into a new subscribers house?—Well, the capital cost in London is 55*l.*

4431. Fifty-five pounds?—Yes.

4432. And 75 per cent. of that represents labour?—The mere operation of putting in and taking out. Of course, one has to correct that with this: The 55*l.* is the average cost with every subscriber who is connected in London, but then that includes switch boards, and all the internal machinery, not affected by a change of owners; but if you dissect the 55*l.*, you probably will reduce that particular element involved in joining up a man down to less than one-half of it, but still there is an enormous wastage. I suppose, roughly speaking, we might say, 25*l.* out of the 55*l.* would be the cost of attaching every individual subscriber over and above the contribution which, as a subscriber, in common with the general body of subscribers, he contributes to the central administration, the switch boards, poles, and distributing machinery.

4433. Then it would be 75 per cent. of that 25*l.* which is lost in labour?—Yes, absolutely lost; gone, waste. That has to come out of the capital, or out of the revenue; whichever way it is, whether capital or revenue, it has got to be paid for.

4434. I understand you to say that so far as you have examined the estimates given on behalf of the London County Council, no account was taken of this great wastage which is constantly going on?—I cannot think that it was, because if so it seems to me that the estimate is not very reliable; but perhaps I had better say what it is, because I am very anxious to give the County Council the full benefit.

Mr. *Benn.*

4435. Have you any similar figures showing new subscribers and ceasing subscribers in such a city as Berlin; any comparative table to help us?—No, I have not; but, of course, it goes on; the same causes operate in every place; subscribers do go off.

4436. You gave us several reasons for this large figure, 4,400?—Yes.

4437. Changes and fluctuations in business?—Yes.

4438. Does it not occur to you that a very large portion of that number may be accounted for by persons getting sick of the telephone and giving it up?—Well, I can imagine some very silly persons giving it up.

4439. I have heard of cases where they have said they would not stand it any longer?—No doubt there are a certain number of persons who will cut off their noses to spite their faces.

Mr. *Benn*—continued.

4440. Do not you think those figures rather show that it may be due to the inefficiency of the service, and that there is some ground for a plea of justification?—I can understand that if people hope for something and do not get it, they go off; that is what my complaint is; most of these complaints are founded upon unreason, not reason. As far as they are reasonable one accepts them with regret; as far as they are unreasonable; well, what shall I say one thinks of them?

4441. Any way 4,000 people are not satisfied, and go off for some reason or another?—Do not put it in that way; if you suggest that they all went off because they were not satisfied, I will tell you that people die, then they do not want a telephone; people fail in business, then they do not want a telephone; I know some people who are so sick of London (including the telephone) that they go and live out of it, then they do not want the telephone; therefore your induction, that any material part of the 4,000 went off from disgust is not the real reason.

4442. I was only struck by the fact, that among your reasons for people giving up the telephone, you did not suggest to the Committee that some few people might be disgusted with it?—Of course it would be ridiculous to say that some few might not have gone off from that reason; but that would not affect my question very much if it were a few; if you suggested that the whole went off it would.

4443. I do not suggest that for a moment?—You did suggest it, I think.

Lord *Stanley.*

4444. In this number of subscribers who went off, were there any who ever wrote, and asked whether they could have a more limited service, a smaller exchange, and a cheaper rate?—It is just possible one or two may have done so; but I think none did.

4445. At any rate, not more than an infinitesimally small number?—Just so. In the case of deaths, removals, badness of trade, the telephone users do not want you any more; and I am sorry to say there have been a large number in bankruptcy. Of course the moment we find a man going off, we go and see what is the matter; and we sometimes ourselves have suffered through not having been paid. The incidents of business involve a certain number of people going off. My suggestion to gentlemen who draw inferences is, that they had better take into calculation the incidents that involve the constant wastage of capital.

4446. You say a number of subscribers cease; do you count in those such a case as this: Suppose a man changed his residence, we will say from No. 31 in the street to No. 30, do you count that as a subscriber gone off?—No.

4447. That does not count as one of those you speak of as "gone off"?—We take the risk of moving the instrument there, and I think he pays some small sum for the change.

4448. You do not count taking the instrument from No. 31 to No. 30 in the same street, as the loss

Lord *Stanley*—continued.

loss of a subscriber?—No; he pays the small sum we think fit to charge him for the change; he is a continuing customer.

*Chairman.*

4449. He is a continuing customer under a five years' agreement?—Yes.

4450. The agreement still holds good?—It does.

Lord *Stanley.*

4451. Did not you issue, the other day, a paper saying that if one bound oneself for five years one could get the telephone on lower terms?—Yes; we have a descending scale of charge.

4452. Can you tell me at all how many came into that agreement?—We are getting now a very large number of our subscribers on long agreements; they get a substantial benefit, the 20*l.* drops to a lower figure. I have already put in a return showing this. This is the paper. It is a general statement of the tariffs of the company throughout the kingdom. In London (the metropolitan area), "on a five years' agreement, first connection, 17*l.*; second and additional connections, 12*l.* 15*s.*; private houses, 10*l.*; on a yearly agreement, first connection, 20*l.*; second and additional connections, 15*l.*; private houses, 12*l.*" That is the London thing.

4453. The rates to Members of Parliament are special, are not they; Members of Parliament are given cheaper terms still, are not they?—Of course there are exceptions to all rules. The result of that has been, of course, that we get a considerable number of our subscribers now on long agreements.

*Chairman.*

4454. I am a subscriber, and a Member of Parliament; I have not had it cheaper than the rates quoted; I do not know whether I am entitled to any consideration?—Some Members of Parliament, sir, are less persistent than others.

Mr. *Tully.*

4455. Does a shareholder get it cheaper?—No, sir, we are very severe with our own family. However, the operation of it has been that what with the five years' agreements, and what with the second and additional connections at a reduced scale, the 20*l.*, the initial figure for one connection for one year for one instrument, is brought down to an average of 14*l.* 10*s.*

*Chairman.*

4456. Have you anything more to say with regard to that estimate?—I was just going to point out one or two things upon it. This is Mr. Newland's estimate. Mr. Newland was in our service for a great many years, and I would wish to speak of him with the greatest respect as a very able and quite unexceptionable gentleman; and I have no doubt that in making his estimate he acted entirely upon his experience and conscience.

4457. In what capacity was he in your service?—He was one of our sub-engineers on the south of the river. This is for the benefit of those gentlemen who are the advocates of the

*Chairman*—continued.

County Council taking this thing over. It is a question whether this estimate does not in itself include a great many fallacies. It is an estimate for a metallic circuit in London based on 40*l.* for 10,000 subscribers; and about the 40*l.*, well we know, as a matter of experience, that it is more than 40*l.* a great deal. I have great respect for Mr. Newland, but I would rather act upon my own ascertained experience from day to day, and from year to year, than upon any opinion; but if it is a case of "opinion," I prefer infinitely the opinion of Mr. Preece, of the Post Office, to that of any gentleman connected with the County Council. He says it is 55*l.*, which is in fact about the truth. Then he goes on. That estimate justifies a 10*l.* subscription; but it carefully ignores one of the things which is always being discussed and thrust upon us, and that is the method in London of carrying on this business. We have been driven to metallic circuit London overhead; we have none (or next to none) in the shape of underground communication, and the Committee have heard many opinions upon that as to what can be done, and what cannot be done. This estimate does not deal with that; it shirks that altogether.

Mr. *Snape.*

4458. Why have you been "driven" to it; you say you have been driven to adopt the metallic circuit overhead; why is that?—For want of power, No. 1; in consideration of the enormous difficulties of getting under streets, and want of power of going under them; and the enormous cost, the additional cost. This gentlemen is good enough to say, first of all, "my estimate is for a metallic circuit system." I quite agree. We so much agree with that, that we have done it. "There is, I take it, no question but that it would be a physical impossibility to erect an overhead system of bare wires similar to the greater portion of the National Telephone Company's system, that company's wires forming such a network in places as almost to prevent a single wire being run, and quite to prevent the running of spans, consisting of a large number of wires." Then the alternative to that is cables in the air; and I understood Mr. Preece (who is the great authority to whom of course I should bow) to say that cables in the air are not the best method of conducting this business with reference to its efficiency. "Undoubtedly, from the point of efficiency" (this gentleman concurs), "a system entirely underground would be the best for many reasons, and although this would entail an expenditure not to be lightly entertained, I do think that in undertaking the wiring of such a city as London, it would in the long run be undoubtedly the best policy to adopt." Well I agree with him. When the system was started years ago, when the electric light companies had not commenced to undermine London, when the sewers and gas companies were in less occupation, it might have been possible then, very difficult very costly, but it might have been possible to do it. But that possibility has gone with time, almost, I believe to the vanishing point; certainly not without enormous expenditure could it be done.

Mr. *Snape*—continued.

"It would entail an expenditure not to be lightly entertained." "I have not attempted here to arrive at the cost of a system entirely underground, but understanding that the council would, in the event of their obtaining a licence, adopt an aerial system" (in trunks that is), "I have estimated that the bulk of the wires would be run in overhead cables," notoriously the very worst method of getting efficient service. The best method is a wire not cabled up at all in the air. Then he goes on, "Taking it for granted" (people take a great many things for granted) "that at the ordinary tariff rate the exchange wire would not exceed one mile in length" (you see he takes for granted an element which it is of the greatest importance to know, not to take for granted), "it would be found that the average length per subscriber would be not much more than 400 or 500 yards, but, to be on the safe side, I have taken the average length all through to be half-a-mile." Inasmuch as this expenditure for a large part of it depends upon absolute truth and knowledge of the element (which is an initial element, because so many things cost so much money; if you estimate for half-a-mile, and it turns out to be a mile, it just costs double what the estimate is). I am afraid if this is critically examined it will be found that this date is not sufficiently accurate.

Mr. *Benn.*

4459. Can you tell me what the length of your wire is, on the average?—Over a mile.

4460. For London?—Yes. Now here is another thing which I commend to the attention of honourable Members who think this thing can be done, and who are going to take the responsibility (if they do) of suggesting that it shall be done. "To estimate for such a large system, covering so large an area as the County of London, is a very difficult matter, as the knowledge of the position of subscribers and exchanges would alone enable a close estimate to be made." It is the vital position. It is a position which has entailed upon our company immense loss, because we had to start this business without knowing who was going to subscribe to it; and without knowing what we do know now; without knowing what was the scientific and the easiest means of accommodating that service; and, instead of sitting down with a map of London, as this gentleman has done, or as some other experts have done, and being able to lay out the thing in the manner the most economical as regards expenditure, and the most efficient as regards work, we are at the mercy of everybody. We never know when we start an exchange how we can get people connected with it; we are at the mercy of so many people. This gentleman knows the disadvantage of this, because at a later period of this thing he says "the knowledge of the position of subscribers and exchanges would alone enable a close estimate to be made." But then he says: "After looking at the position of the subscribers to the existing system I have estimated that about 15 exchanges would be necessary."

*Chairman.*

4461. Fifteen exchanges (about) in the area of London?—In the area of London. "I am aware that for a larger number of subscriber than now exist, this is a smaller number of exchanges, but I would point out that the policy, and I rightly think, of the National Company is to work with as few exchanges as possible without unreasonably increasing the length of subscribers' wires." Now, you have had two gentlemen. This gentleman is a perfectly competent man to form an opinion if his data are right. You have had another gentleman who wants to have I do not know how many exchanges in London, to be cut up into small areas; multiplication of exchanges. We have been striving all these years upon the best advice in this country and elsewhere to diminish the number. Every exchange that you have to communicate through to somebody else involves the elements of disruption and delay. If you go from one to another, a simple operation, the chances are that it is effectual and prompt; if you go through an intermediate one to a further one, at the intermediate one there are chances of delay and disruption; and that multiplies (well, I almost must say as the cubes of the numbers) the disadvantage of it. And we, all these years, poor creatures, have been trying to eradicate this evil from our system. But now we are told we are all wrong. I do not think we are; at all events, I call this gentleman as a witness in my favour, and I put his against General Webber's evidence, which seems to indicate a totally different method.

Mr. *Benn*

4462. Of course you are aware that General Webber was not called for the county council?—No, but somebody called him; "General Webber" is General Webber.

4463. But this is a county council document?—Then I am happy, sir, to present you with this as counteracting any influence which General Webber may have had upon your mind.

4464. I only draw your attention to the fact?—I am much obliged. I accept this very much as evidence from the county council engineer: "It would probably be found, on the completion of canvassing, that this arrangement" (that is the method he proposes) "might be subject to variation, but inasmuch as all figures must necessarily be hypothetical, it will, I think, form a good working basis; and even if it were necessary to divide up the 10,000 subscribers in a different way, it would not make much difference in the cost." Well, that is a sort of saving thing; it must be hypothetical: until I know certain things which I do not know, I cannot possibly estimate the cost, &c., &c.; but, now this is the bit I want particularly to bring home to the Committee: "As it is not at all likely that a start would be made with as many as 10,000 subscribers, I have for the present reckoned the principal exchanges as accommodating 2,000 subscribers, and I have estimated that for that number it would be necessary to branch out from the exchange in 40 different directions, with 50 pair cables"; and so on. Then he goes on to do us the credit to say he thinks as regards the new exchange in Lime-street, the switchboard there, it is safe to state, is the most perfect switchboard in existence; and then that his estimate is based on experience,

and

Mr. *Benn*—continued.

and this, sir, is a part to which I beg to call your special attention. He estimates that the charge for wayleave rentals in London will be covered by 5,000*l.* for these 10,000 subscribers. All I can put against that is our experience which I have already communicated to the Committee. He is entirely living in illusion about that. That is not a capital charge; it is a working expense; and we are paying at this moment in London 1*l.* 13*s.* 4*d.* on every line in the nature of wayleaves. He allows 5,000*l.* for 10,000 subscribers; that is 10*s.* each.

*Chairman.*

4465. £1 13*s.* 4*d.* per mile?—Per subscriber.

4466. Per subscriber for wayleave?—Yes, but then he says we do not know how to do it. Well, I shall be happy to give him a very handsome commission on all he can reduce to 10*s.* from 1*l.* 13*s.* 4*d.* This shows the sort of thing we are subject to. Now, here is the cream of the whole business: "It may, perhaps, be thought that my estimate for procuring wayleaves (500*l.*) is too low, but I am convinced that the National Telephone Company do not secure theirs in the most economical way; and I may further state that they often pay extravagant rentals for them." Well, I am sorry to be condemned by one of my own infants; it may be true. I do not think it is. "Independently, however, altogether of this" (now here is a saving clause), "I take it that the council, in the event of their obtaining a licence, would secure compulsory powers." You know, sir, that the thing we have been asking for, knocking at the doors of Parliament for years, is to get some reasonable powers. I have no doubt that with compulsory powers we could make better bargains; but we have not got them, and I do not think the county council will get them in the present temper of Parliament, if I know it; therefore, the whole of this thing is hypothesis.

4467. And the hypothesis is based upon the idea, or upon the belief, that the local authority would do it cheaper than a private company; is that consistent with your experience of the comparative cost of matters carried out by a local authority and a company?—Well, local authorities are of course most estimable people, and one desires, especially in these days when they are getting so powerful, to speak with the greatest respect of them; but I should not think they are model administrators.

Mr. *Tully.*

4468. Have not the local authorities power over the streets?—Oh, yes, they have power over the streets. That, I think, they ought to have.

*Chairman.*

4469. But not a county council, have they?—Power over a street means regulation of the street for the purpose it was designed for; that is, traffic and passage. They must have that authority.

4470. The county council for London have not such powers over the streets, have they?—Not in the city.

Chairman—*continued.*

4471. Nor anywhere?—No. That is a natural power to the local authority; but if you ask me whether they do the work under the streets better or cheaper than a private company, amongst my other misfortunes I have had the misfortune of being chairman of one of the largest electric lighting companies in London, and for the sake of peace we employed the local authorities to do our work under the streets; but I think we could have done it certainly as efficiently, and perhaps cheaper, if we had been permitted to do it ourselves; but that was a condition they put upon us, that they should do it.

Mr. *Tully.*

4472. The local authorities having powers over the streets would not want compulsory powers for putting wires under the streets?—They have no powers to run wires at all. The local authority has no power to use the street for any but specific purposes.

4473. The Glasgow Corporation, for instance, have no power to put down wires?—I do not know what their powers are. If they have such powers they must be special powers obtained from Parliament. A local authority may license gas and water companies, who have power from Parliament, to do certain things subject to the local authority.

4474. The Glasgow Corporation would not have power to put down wires, you say?—Unless they have that power in some Private Act; I do not know that they have; and I do not think they have. If they have it is quite exceptional. These powers to do these things cannot be got without going to Parliament.

Mr. *Benn.*

4475. Quite so?—If they do go to Parliament on this estimate, I pity the gentleman who is put into the box to support it, if he is subject to cross-examination at the hands of Mr. Pope or Mr. Littler.

Mr. *Grant Lawson.*

4476. Is there anything in that estimate put down for the expense of coming to Parliament to get the Bill?—No, nothing whatever.

Mr. *Benn.*

4477. There is a large item for contingencies, is not there?—Yes; I am sorry to weary the Committee, if I am wearying them, but I am so anxious that they should really be placed in possession of the facts of the case that at the expense of being tedious I want to impress this upon them. Here is a fallacy underlying this: It means really that you cannot do this unless you have compulsory powers. Well, you cannot get them, I am assured. But now, supposing you have got them, this proceeds upon the theory that the man that does the work is in possession of powers which will enable him to lay out scientifically and with the utmost economy a perfect system; and then the calculation proceeds. Having done that, it is for 10,000 subscribers, the annual income is so much, and that means that the 10*l.* will leave a profit. How long are they going to be getting 10,000 subscribers? Suppose they achieve the erection of this

Mr. *Benn*—continued.

machinery two or three or four years hence; there it is, they have spent the money; how long are they going to be before they get 10,000 subscribers? Because the cost per subscriber, and therefore the payment per subscriber, must depend upon how that capital and how the working expenses (which for a large part are fixed charges) are spread over the numbers. I will undertake to say that they will not get 10,000 subscribers in three years. What does it cost per subscriber? During the first year they may have 2,500; in the second and subsequent years they will have got more and more and more, with all this wastage going on; it is purely chimerical. They would be bankrupt at 10*l.* subscription.

*Chairman.*

4478. And so far as you can see, this estimate takes no account of these facts?—Not at all; it estimates that you are at once to jump into beneficial occupation of the expenditure of 400,000*l.*, whereas it will take a very long time to develop in the area of the County of London 10,000 additional subscribers.

Mr. *Benn.*

4479. True, but it says at the bottom of the page: "As it is not at all likely that a start would be made with as many as 10,000 subscribers, I have for the present reckoned the principal exchanges as accommodating 2,000?—Yes.

4480. This estimate you have described as "chimerical;" I think that is the word you used?—It strikes me so.

4481. Do you happen to recollect a similar estimate of which you were the father?—Yes; you mean the new company.

4482. Yes; I should like to compare that, if you will allow me, with this?—Yes.

4483. That is an estimate which was put out under your distinguished name in this prospectus?—A more distinguished name than mine, too.

4484. It is also endorsed, I see, by a number of eminent engineers?—Yes.

4485. Dr. Thompson, Mr. Kennedy, and Mr. Bennett?—Yes.

4486. Do you remember that estimate sufficiently to tell the Committee, with regard to London, how much it varies in the matter of price per subscriber from the one you describe as "chimerical"?—I think this must have been based upon that; I think the source of origin must have been the same.

4487. Then are we to understand that this statement of yours which bears your name was chimerical?—It was; yes. I see you look surprised.

4488. I am not so accustomed probably to the drafting of a prospectus as you are?—I did not "draft" the prospectus. I signed it. I take all the responsibility of having signed it.

4489. Then I should like to ask you whether this statement is entitled to respect. We have here a statement of a capital outlay for supplying the first 10,000 subscribers in London.

Mr. *Benn*—continued.

This is the prospectus of the new company; I will commence at the top of page 2: "It is intended, therefore, to supply plant on the double wire (metallic circuit) system, to accommodate 10,000 metropolitan subscribers, with central exchange switchboards, and other apparatus, capable of working 25,000 London connections. The system to be adopted by the company will comprise all substantial improvements in telephony, and especially the metallic circuit, which will be available for connection with the Government trunk system. The capital outlay for supplying the first 10,000 subscribers in London, and upwards of the same number in the provinces, including 1,400 private lines and about 400 call offices for public use, for developing the Manchester and Bolton Exchanges, and for opening others in some of the provincial towns, has been carefully considered by Mr. A. R. Bennett." You told us he was a gentleman trained under the auspices of your company?—Yes.

4490. "Acting as the chief engineer and general manager of the company"?—Yes.

4491. "His estimates have been checked and approved by Silvanus P. Thompson?"—That is the gentleman you have had before you, the electrical engineer, who wanted the telephone company to be a training school for young engineers.

4492. At all events, he was good enough to be referred to as an expert here?—Oh, yes, he was.

4493. And A. B. W. Kennedy: "It is estimated that 750,000*l.* should suffice for these purposes, and on this basis the net revenue of the company should be sufficient to show divisible profits equal, at a moderate calculation, to 12 per cent. per annum on the capital, while the additional facilities of the Telegraphs Act, 1892, may be expected to open up new sources of revenue, and thus increase the profits of the company"?—Yes.

4494. Am I not right in saying that if you divided that figure, allocating the proper proportion to London, the amount per subscriber tallies almost exactly with the figures put in by Mr. Newland?—Yes.

4495. Then, do not you think that instead a company, the company having to fight the natural opposition that some persons have to the request of a company; a municipality, asking for wayleaves and accommodation, and having power to treat with local authorities, and establishing a system which would be by the citizens for the benefit of the citizens, would be in a better position to cope with the difficulties (such difficulties as you have mentioned) than this company?—No, I do not think they would. Why should they? Of course, if they had exceptional powers, if they had compulsory powers, if they are to be put upon a different footing to the commercial company, they would have certain advantages; but I think, against those advantages, there are some disadvantages.

4496. They could borrow money cheaper?—They can; not very much now.

4497. May I point you to the municipal enthusiasm which occurs in such a city as Glasgow with reference to any municipal enterprise of

Mr. *Benn*—continued.

of this character?—Well, I do not know much about the "municipal enthusiasm" in Glasgow; I believe it is a divided house even on that; but London is not peculiarly enthusiastic about municipal telephones; I have not found any evidence of it.

4498. It is young yet?—It is; it will get wiser as it gets older.

4499. I agree with you; but to come back to this point, I want you to explain to the Committee how it is that this estimate here, issued upon such high authority, certified by the leading telephone experts of the day——?—No.

4500. Well?—Oh, well, there I must come in.

4501. You have told us what an able man His Grace the Duke of Marlborough was?—So he was; but he was not an expert, you know.

4502. Still, a business man, combined with the expert; we have your name as the second?—That is very good, too.

4503. I do not think we can have a higher authority?—I have the sense, you know, of my own shortcomings. I hoped it was true, and I wished to see whether it was true, and I was satisfied of the integrity of the conviction of the Duke of Marlborough; I had some doubts whether he was wise, or whether he was not mistaken, and it was when the thing came to close quarters, and when these estimates were examined and understood, that his convictions changed, and that we both came to the conclusion that they were utterly unreliable for this purpose, either as regards outlay or income.

4504. Anyway, they were sufficiently dangerous from a practical point of view to necessitate the clearing of all this out of the way?—The clearing of all which?

4505. By the amalgamation of which you were the author?—I was not the author of it.

4506. You told us you were the author of the amalgamation?—Not the author of that amalgamation, the United. You do not mark time quite.

4507. I beg your pardon; you helped me?—I was the author of the amalgamation between the Bell and the Edison years before I went into this amalgamation with the Duke of Marlborough, and I went into that because I hoped he was right. If he had been right it would have been a splendid business for our company, the National; a great many other people agreed with him, but he turned out to be wrong, and he publicly recanted, as I do. I was mistaken; I hoped for a thing which, when we came to examine it, turned out to be illusory, that is why. Is that a good ground for recanting? If you are my father confessor in this matter I confess freely I was mistaken; so was His Grace; so were we all; and we deliberately did what we did in order to save London getting into a great mess, and an enormous waste of money.

4508. I am afraid I can hardly pose as your father confessor; that would take a lifetime, I am afraid, Mr. Forbes; but I want you to tell the Committee how, in the light of all the experience, continental and other experience, which was at the service of this group of gentlemen, you came to put out a statement which you now tell us is chimerical?—Well, I tell you. Can I



*Mr. Benn*—continued.

be more frank in my confession? The wish was father to the thought. I had no particular ground for utterly casting aside the opinion of Mr. Bennett or Mr. Silvanus Thompson or the Duke of Marlborough, and it was quite worth our while to go in to test this thing. We put our money into it, but before we put our money into it we were wise enough to take care that if these estimates and aspirations could not be realised they should not play "ducks and drakes" with our money. That is why we went into that, and we have saved London from an immense inconvenience and enormous loss.

4509. How far did you go with your enterprise to discover all this?—Oh, a considerable time; some months we were at it.

4510. Did you get to the point of supplying the citizens with any service?—We got to the length of supplying a better method than was suggested by the new company.

4511. But how could you possibly discover that those figures so certified were fallacious unless you proceeded with your enterprise?—Upon examination and instruction cannot you arrive at a conclusion without spending the money first. We arrived at it by argument, and induction, and conviction, and so did the Duke of Marlborough and his colleagues; Sir Albert Rollit, I think, was on the board; he is not altogether a baby.

4512. On that?—Yes.

4513. Sir Albert Rollit was on the board of the New Telephone Company, and in the course of time I think it was absorbed by the National Company?—You have not seen the agreement, I dare say, between the two companies, but the agreement stipulated that inasmuch as we were to put 250,000*l.* into this enterprise we were to be represented on the board; and the agreement stipulated that as we had agreed, as part of the business, that there was to be inter-communication between the two systems, as you see in the prospectus, the Duke of Marlborough should come upon our board. Unhappily, the poor Duke of Marlborough disappeared suddenly. Then we carried out our agreement by putting on another director, Sir Albert Rollit. That is the sense in which he came upon our board.

4514. I will just ask you once more, because I think it is very important; you put out this estimate; upon that estimate persons subscribed to your company, the New Company?—Yes.

4515. I want to ask you how you discovered by practical experience that these figures were fallacious?—Well, we took our own experience. We had urged upon the Duke of Marlborough over and over again: "Well it may be, but now just look at our figures. If you, Mr. Bennett, Mr. Silvanus Thompson, or any of these people you rely upon, can do this thing, it will pay us well to go in and assist to have it done." When we came to dissect it the Duke of Marlborough was confirmed in the doubt as to whether it could be done or not; and he was confirmed in this, that there was a better way, a more expeditious way, a more economical way, and a more efficient way of doing the same thing; and that was by carrying it through the machinery of the National Telephone Company. The object he

Mr. *Benn*—continued.

had in view was to give a metallic circuit for London and a more moderate and a more efficient service. That is exactly what we have done. Now what do you think we paid for doing it? Because of that circular, and because of our connection with it, we have bought back the shares of all the people who were induced to go into that thing upon the credit of our names. Could we have done anything more than that?

4516. Oh, no; I am not saying anything as to that?—We have not left them out in the cold.

4517. I am not concerned with the subscribers?—You had better know the truth.

4518. I desire to know the truth; but I want to ask you this: When you put your name to this document you were fully acquainted with all the experience which had come from your experience with the National Telephone Company?—Yes; but then you see I had that weakness not to be over-confident either in myself or in our organisation; and I thought there might be cleverer fellows in the world, and if there were they deserved encouragement. As a matter of business, it was worth our doing; we did it; and we converted the Duke of Marlborough and his colleagues to the view that there was another, more effectual, more prompt, and better way of doing the same thing, and we have done it.

4519. But my point is this: that in 1892, with all your experience with the National Telephone Company, you sign a document and you put out an estimate?—On the faith of certain experts.

4520. Yes. But you came to that signature with all the experience of the National Telephone Company, in view of all the difficulties which you have recently mentioned to the Committee?—Yes; now you may state it just as high as you please, as if you were counsel prosecuting a defendant, and I am prepared to meet it all. I say that we did; we hoped that Mr. Bennett and Silvanus Thompson and their advisers might be right; it was our profit that they should be right. Nobody had a greater interest in its being right than we did; but when we came to examine those gentlemen we found they were wrong, and we found that there was a better (as I have said before) and a prompter and more economical way of doing the same thing; and we have done it. Now you may go on harping upon that as long as you like; but that is the fact.

4521. Excuse my being so dense; but I want you to tell the Committee what additional information you derived from the practical point of view at the date of the amalgamation other than the information you had when you signed that document?—The information we derived was this: that although we hoped that Mr. Bennett and the Duke of Marlborough might be right, and although we knew that what they said was possible, it was contrary to our experience, we persuaded them that they were wrong and that we were right. That was the reason; and they were not prepared to go on with it, and they withdrew from it because they were satisfied that those estimates were illusory.

4522. You and your friends had taken the precaution, I think, to absorb most of the capita

Mr. *Benn*—continued.

of the New Telephone Company?—No, we had not then. We had subscribed by agreement 250,000*l.* It was worth our while to risk 250,000*l.* to ascertain whether these gentlemen were right or wrong.

4523. Is it not a fact that had this company proceeded with its enterprise it would have seriously affected your National rate of subscriptions and your profits?—No.

4524. Will you tell the Committee the difference in the two tariffs?—£12 they talked about.

4525. £10, I think?—£12.

4526. £12 was it?—Is it in the prospectus?

4527. It is not in the prospectus?—Then I can tell you it was 12*l.* 12*s.*

*Chairman.*

4528. There are no other points that you wish to mention, are there?—No; I trust the Committee have appreciated that I have rather been lengthy because I was desirous, as far as possible, of dispelling the grave charges brought against the National Telephone Company.

4529. I think the information you have given has been of great interest. There is just one question I want to ask, that is, whether the 14*l.* odd which you say is the average subscription in London is an average of the actual subscriptions paid?—Yes, sir.

4530. Supposing all the subscribers entered upon a five years' agreement, the average subscription would be to some extent lessened?—The 20*l.* being the initial subscription for one year, 3*l.* coming off in respect of a five years' agreement, and the duplications at the lower rate bring it down to an average of 14*l.* 10*s.*

Sir *Charles Cameron.*

4531. You have given us some very interesting information about the cheapness of telephone communication. I think you told us that whereas a hundred words by telegraph cost 4*s.* 2*d.*, the average cost per message of a minimum of a hundred words by telephone is about a halfpenny?—A little over.

4532. A little over a halfpenny?—Yes.

4533. That is at the present cost of your instruments. The present average cost, I think, is 9*l.* odd?—Yes; 9*l.* 2*s.* 2*d.*

4534. That, of course, is very interesting and very cheap; but in those places where you have cheaper subscriptions of course that cost would come down in accordance with the subscription; that is evident, is it not?—I do not know whether I quite follow the honourable Member.

4535. We will take a concrete case: you have spoken a good deal about Stockholm?—Yes.

4536. You hold that it is not very fairly comparable to London?—I should have thought not in the least.

4537. There are in London how many subscribers. I think you said 10,000 odd?—Yes, I gave those figures.

4538. I suppose you are aware that in Stockholm there are 11,500 odd?—Yes.

4539. So that in point of magnitude and the number of subscribers you have, the towns are very much upon a par; is not that so?—That is so.

4540. I presume you do not contradict what has

Sir *Charles Cameron*—continued.

has been said about the excellence of the service in Stockholm?—No.

4541. You admit that there is no fault whatever to be found with it?—No.

4542. And that it compares favourably with what it is in London?—I have no right to complain of the service of Stockholm.

4543. And you are aware that the Duke of Marlborough, in his letters when he was recanting, described the service in Stockholm as an ideal service?—Yes. I do not know whether it was the Duke of Marlborough or Mr. Bennett; however, it was described as an ideal service.

4544. It was the Duke of Marlborough. May I just recall to your memory who it was? The Duke of Marlborough, in a letter that we have in our Appendix No. 6, says: "From what I have seen of the working of the telephone in that country" (that is, in Sweden), "the facility with which persons in one town converse with those in another is quite remarkable. The subscriber calls up the Stockholm exchange, say, and requests to have a conversation arranged with either Malmö or Gottenburg. The trunk operators communicate together by comparing the lists of persons who have appointments, and the operator at Stockholm telephones back to the subscriber the hour at which the conversation required has been negotiated, and in the busy time," and so on. He says: "With regard to Sweden, which is probably the European country which has developed the telephone business more completely than any other, the system of Government trunks and local exchanges has arrived at a wonderful state of development"?—Yes.

4545. You have rather more subscribers in Stockholm than in London?—Yes.

4546. Let us compare the area of Stockholm with London; the area of London is 630 square miles?—Six hundred and thirty square miles is the London area.

4547. Could you tell me what number of square miles would be comprised in a circle with a radius of 43 miles, which is the radius of the Stockholm area?—Forty-three, is it?

4548. One of your engineers could tell us roughly, in a very short time?—Yes; we will work that out.

4549. I think you will find that it works out to a good deal more than the London area?—It may; but one side of it is sea.

4550. There are no inhabitants on the sea. We may possibly get the accurate information shortly. The question I have asked, as to which you can fill in the answer, is, the area, the number of square miles which would be embraced in a circle of 70 kilometres, or roughly, 43 miles round Stockholm. I think we may take it at once that it is a larger area than London?—It may be; we will take it for the sake of argument.

4551. Take it that it is a larger area than London. You have told us that there are a larger number of subscribers in Stockholm than in London?—Yes.

4552. Can you tell us the population of Stockholm?—Two hundred and fifty thousand, or something of that kind.

4553. If you had the same proportion of



Sir *Charles Cameron*—continued.

telephone subscribers to population in London as you have in Stockholm, that would give you something like about 250,000 subscribers in London, would it not?—Yes.

4554. If the result of a system such as has been current in Stockholm had been to increase your subscribers so enormously, and give them a much cheaper service, would it not sweep away all theories as to what could or what could not be done?—It would sweep away all profits.

4555. If the result were that the company that provided the thing was able to pay 8 per cent., which was their maximum dividend, would not that sweep away your theory as to no profits?—I think that "if" is a very important factor.

4556. What I wish to show you is what has been done there?—But I cannot find the slightest analogy between Stockholm and London. I am rather inclined to agree with the Director General of the Telegraphs in Sweden, who tells you what the effect has been. He says, that "in consequence, a competition has arisen, which works in all ways unfavourably, and which has also entailed the result that the fees have been brought down far below the proper ones." We are not philanthropists, and a system, however satisfactory to the subscribers, that has operated in that way, is not one, I think, that you would find any commercial company in England very keen to follow, or any bankers to find the money to carry out.

4557. Assuming that there are people who sometimes embark in schemes that do not turn out any great financial success, and assuming that the public benefits by the competition which results from these unwise schemes, the public would have something to say in the matter, the public convenience?—The public, of course, will enjoy the benefit of other people's unwisdom; but that is not a claim that should operate, I think, in the decision of a question of this sort.

4558. I wish to get at some ground-work of facts, and to allow the Committee to draw its own deduction from those facts?—If you ask me my opinion, I respectfully give it.

4559. You have given your opinion very clearly there; but I wish the facts as against certain theories that have been put forth. If I, being a telephone subscriber in London, wish to speak to someone who is not on the telephone service and the telephone exchange, can I do it?—If he is not on the telephone exchange, I suppose you cannot.

4560. Then, are you aware that arrangements exist there by which you can telephone for a messenger to be sent to a man who is not on the exchange, and he is brought to a call office and talks with you?—That is a rational thing to do, and can be done. When this agreement comes into operation we have got a long way in that direction; we can then, by telephone, call a messenger.

4561. That is quite true; but what is to prevent your doing it now, or what was to prevent your doing it up to 1895?—The rules under which I work for my masters.

4562. Did you ever apply to your masters for a license similar to that that has been given to

Sir *Charles Cameron*—continued.

the District Messenger Company?—I do not think the honourable Member can have taken the trouble to read the license to the company from the Post Office, either the first or the second. The limitations are numerous and precise, and what you describe as being desirable to be done was a thing we were precluded from doing.

4563. I do not describe anything as being "desirable to be done"; I simply wish to ask you whether you have inaugurated services which, under the spur of competition, exist in Stockholm?—How can we inaugurate a service which we are precluded by law from doing.

*Chairman.*

4564. Is it not the fact that when the license was granted it was strictly confined to oral communications, and that that restriction was made with the sanction of Parliament at the time?—Absolutely imposed.

Sir *Charles Cameron.*

4565. But is it not also the fact that since the license was granted the Post Office has modified its policy, and has granted a license, for the carrying of written communications, to such organisations as the District Messenger Company?—Yes, they have, under a special contract, I understand, with the District Company; but our license at this moment precludes us from doing what you say ought to be done.

4566. Is it proposed to change your license when the new agreement with the Post Office comes into operation?—Yes, our agreement with the Post Office will enable a telephone subscriber to the adjacent post office to call for several things; the taking down of a message to be sent by messenger, or to be sent by telegram; in fact, pointing to the very thing you say ought to be done.

4567. That is done by an agreement with the Post Office, and what I wanted to bring out was that it was possible to have had that agreement with the Post Office by means of a similar arrangement to that which has been come to with the District Messenger Company, but that has never been applied for?—That has never been done.

4568. You have never applied for a license similar to that which has been given to the District Messenger Company. As a matter of fact, you have not?—Of course I have not; but then I want to say something more.

Sir *James Fergusson.*

4569. May I put one question to you; is it not the case that the Post Office would never have allowed you to do it if you had not surrendered the trunk wires?—My experience fully confirms your question, Sir James; they would not.

4570. As a matter of fact they would not?—What has surprised me all through this thing is the utter disregard of the first principle of this contract, that the Post Office have a monopoly of this business.

Sir *Charles Cameron.*

4571. Will you, if you please, allow the postmaster and the ex-postmaster at the proper time to get out the facts concerning the Post Office, and allow me to go on with my line of examination at present?—It is a little hard to blame us.

Sir *Charles Cameron*—continued.

4572. I am attributing no "blame" to anyone; I am simply asking for facts?—I beg your pardon.

4573. If I, being a subscriber to one of your exchanges, wish to send a telegraph message from my house to the Post Office and through to some other part of the kingdom, can I do it?—Not now. After the operation of the new agreement you can.

4574. You cannot do it at present?—No.

4575. Are you aware that in Stockholm, even with a company that competes against the Post Office, they have messengers who will receive a telegram and hand it into the Post Office?—Yes.

4576. You are aware of it?—I am aware of all that.

4577. If I, being a shipowner, wish to put the telephone in my ship, have you any arrangement or tariff for that?—No, none. I am quite aware that it is done in Stockholm.

4578. You are quite aware that it is done in Stockholm?—Yes.

4579. You are aware that there is strong telephonic competition in Stockholm?—Yes, there is, with the results that I have given the Committee.

4580. There are two companies?—Yes.

4581. The General Company and the Bell Company?—Yes.

4582. And there is a State or postal telephone system besides?—Yes.

4583. Possibly, now, if any of your friends have worked out the area of Stockholm, we might get it in at this point?—It is about 5,000 square miles.

4584. We will take it at a very reduced figure and admit that half of it is sea; you have got between one and two thousand square miles of telephonic area?—Half of it is sea, and a good deal more than half of it is desert, forest.

4585. That does not make telephony any the more remunerative?—But it does affect the character of the population.

4586. The character of the population it would rather tend to make less telephonic, would it not?—But I mean when you talk about 5,000 square miles, you must see how much of it is possible for telephonic uses, otherwise you have got a fiction.

4587. As a matter of fact, you have there the General Company, which competes with the Post Office, which charges half the subscription for a maximum subscription, and *5l.* 11*s.*, with an initial payment of *2l.* 15*s.* 7*d.*, gives a metallic circuit and free communication over this circle of 70 kilometres?—Yes.

4588. And you have got the fact that there is an enormous development of telephone business there?—Yes.

4589. Now, we will come to talk about the injurious effects of competition. You say that if the New Telephone Company had gone on it would have cost the public a great deal of money?—Yes.

4590. I do not quite follow you how it would. I can see how it would have cost the companies more

Sir *Charles Cameron*—continued.

more money, but I cannot see how it would have cost the public money. Will you please explain what you mean?—First of all, I should have thought that the people who go into these ventures and find all the money are part of "the public." They want some consideration.

4591. We will take that as an abstract proposition; "the public" generally is a large entity, whereas "the public" of shareholders is a small one?—I may say at once that I cannot agree with what I have heard suggested in this room. It seems to me to be this (well, I know what would be thought of it in the City): that the position of the undertaker, the man who runs the risk of the enterprise, is not to be considered; that the moment he has spent his money, led the way and developed the business, he is to be utterly disregarded, or his claims for consideration, and those people who profit by his experience and by his risk are to come in and to be encouraged by corporations to extinguish him. That does not seem to me to be very moral or very wise.

4592. Then you must sympathise very strongly with the position of the General Telephone Company in Stockholm?—I sympathise with any company in those straits.

4593. I ask the question for this reason: after they had developed their business the Postmaster General came in and competed with them?—Yes, they are precisely in the same position there as we are in England. There is nothing to prevent the Postmaster General coming in and competing with us. That is a very different thing from other speculators, and people who want to cultivate this sort of enterprise, not for the public, but for themselves.

4594. But just let us confine ourselves to the simple fact. As a matter of fact, what occurred in Stockholm was this: The General Telephone Company had established a service?—I see you have got Mr. Bennett's book there.

4595. I have?—Is that evidence?

4596. We will get Mr. Bennett if you dispute it, but I thought you had some objection to Mr. Bennett giving evidence?—Not the slightest.

4597. You have no objection?—Not at all so far as I am concerned. I take it *cum grano*. I do not know what is in that book. I have a general idea.

4598. We will take it *cum grano*, as you say?—I do not know whether it is any good pursuing the question; I find no parity between Stockholm and London.

4599. It is not what you "find;" it is what the Committee have got to find?—Exactly.

4600. As a matter of fact, you had in Stockholm the General Telephone Company, with a large business?—Yes.

4601. On the single wire?—Yes.

4602. Then you have the fact that the Postmaster General came in and started a competing exchange at a low rate with double wire?—Yes, I take it from you that it is so; I have not read the book.

4603. When you express yourself so very strongly as to there being no analogy between the case of London, or this country, and Stockholm, I presume you are acquainted with the case of Stockholm?—Well, of course, I have got a heap of papers here about Stockholm, and I know what is in that book pretty well, but I cannot see its application to what is here.

4604. Probably you cannot; it is for us to find the "application;" but after being subjected to that competition, you are aware that the present system in Stockholm of the General Company is entirely metallic circuit?—Yes; everybody profits by their business experience and supersedes a bad system by a good one. That is just what we are doing in London.

4605. Exposed to this strong competition of the Post Office, the General Company has reorganised its system, put down complete metallic circuits everywhere, and paid a handsome dividend at the same time?—Well, we have done it, you see, without competition in London.

4606. They have got it finished and you have not?—We shall have ours finished within a few months of this time; and it is a much easier job in Stockholm (I do not know whether the honourable Member knows it) than it is in London.

4607. They have more subscribers in a town of 250,000 inhabitants than you have in a town of five millions?—Yes; but that does not rest with us. We are arguing round a circle. I have already said why. What are the public reasons; what are the apparent reasons why, in one place, a telephone should expand, and in the other it should not?

4608. You have given us a number of very interesting figures which appear to me to apply equally to the case of Stockholm and to the case of London. For instance, you have told us the various charges, and so on?—Yes.

4609. Wayleaves; they have wayleaves, I believe, in Stockholm?—They have.

4610. Municipal interference. You are aware that in Stockholm the municipality actually had a quarrel with the Postmaster about wayleaves?—Yes; I can understand municipalities doing odd things; but how much money did ever they pay for wayleaves? Does the book tell you that?

4611. How much money?—Yes, per subscriber.

4612. I will get it for you; you mean their charge per subscriber?—Yes; I want to know that.

Lord *Stanley*.

4613. The cost of wayleaves you want to know?—Yes; of course they are subject, as we are in this country, to certain limitations about the interference with private rights; therefore in theory you have to pay wayleaves in Stockholm; so you have in Belgium. Last year I can tell you what they paid for wayleaves in Belgium, 1,600*l*. What do we pay for wayleaves? I have put it in evidence.

4614. The question I understood you to ask was: How much per subscriber the wayleaves cost in Stockholm?—That is what I should like to know; but then, unfortunately, the accounts of the State administration do not show that. I know what it costs in London, 1*l*. 13*s*. 4*d*. If it costs 1*l*. 13*s*. 4*d*. in Stockholm, then there is a parity of reasoning. I doubt whether it costs the odd 3*s*. 4*d*.

Sir *Charles Cameron.*

4615. You have got municipal control and the lack of the powers which you possess here. You say you are aware that the Postmaster has been interfered with by the municipality?—I daresay the Postmaster here has been interfered with.

4616. That makes the analogy the more complete?—No, it comes to this: what is the practical application of a theoretical obligation? Nothing in this country.

4617. You have told us about the restricted service of tolls that you have instituted at Croydon, and so on?—Yes.

4618. You are aware that a similar system is pursued by the Bell Company in Stockholm?—I daresay; I hope with more success.

4619. Their charge is under 2*l.*?—£1 19*s.* 9*d.*, with an initial charge of 11*s.* 1½*d.* and a restricted number of messages.

4620. You are aware that in Stockholm the competing exchanges intercommunicate?—Yes.

4621. And you are aware that the General Telephone Company (and I believe also the State) gives access to its subscribers over the entire 70 kilometre radius?—Yes.

4622. Without extra charge?—Yes.

4623. You are aware also that there are a number of submarine cables involved?—Of course, being a water city, it would be so, as in Amsterdam.

4624. Those are more expensive than land cables, are they not?—Well, I should hardly think they are under the canal. Under the sea it is so, but I doubt whether it is under the canal. Stockholm and Amsterdam are moderately fit for comparison there. I do not think it is very much dearer in Amsterdam under the canals than under the streets.

4625. You are aware that there is a very great extension of the public call office system there?—Yes.

4626. And that there are many more call offices than in this country?—Yes. I will assume, or take it as evidence, that there is a totally different degree of expansion in Stockholm and the neighbourhood; but that does not affect my mind at all as to the great difference in circumstances, why one thing is possible in one place, and not in another.

4627. What are the rates at your call offices?—Threepence for a small radius.

4628. Are you aware that the rate of public call offices within Stockholm is 1*d.* and a third?—I take it to be so: yes, I am aware of that.

4629. And beyond Stockholm, within the 70 kilometre radius, under 2*d.*?—Yes. In some of our towns in England the rate is 1*d.*; but there is such a thing as "standard of values," which people who want to talk theories do not fully realise. What is the relative value of 3*d.* in London, and 1*d.* something in Stockholm?

4630. Where is your system of 1*d.* calls?—London is 3*d.*

4631. What is it in Glasgow?—Mr. Gaine will tell you; I really do not carry every detail in my head; but, in answer to the honourable Member, we will produce the fact. Incidentally, I may quote the postmaster in Sweden: "The fees for conversations are quite too cheap in Sweden." If the state of things evolved in

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Sweden is such as to make a competition which works unfavourably bring down far below the proper ones, the fees ("we are endeavouring to restrict the districts within which one may converse free. The fees for conversations are quite too cheap in Sweden"), that is hardly a thing to follow, that is not an analogy. This is the Swedish postmaster's statement. I can now give you the names of some of the towns where we have the penny calls: Brighton, Leeds, Newcastle, Sunderland, Bristol, Portsmouth, Middlesbrough; those are just a few which Mr. Gaine has mentioned on the paper handed to me.

4632. Is the same charge made by the Post Office there?—That I do not know. However, there they are, and there are a great many others.

4633. Newcastle is a place where you have postal competition, is it not?—Yes.

4634. The severest postal competition, I suppose, in the kingdom?—I do not know about the "severest."

4635. I think in one of the statements you have given us, you show the largest number of subscribers in Newcastle?—Yes.

4636. Now, there is just another point in connection with that. You have shown us the absolute absurdity of Major General Webber's proposal for sub-dividing telephone exchanges. Are you aware that that system has been adopted in Stockholm?—I hope I did not suggest anything of that kind about Major General Webber. What I said was that we had been acting on the assumption that a reduction in number of exchanges was the right policy to pursue.

4637. That is quite right?—And that we were satisfied it was.

4638. That is perfectly right?—Therefore, whatever Major General Webber said upon the subject, as far as we were concerned, it is no matter what he said; it is contrary to our convictions and our advice.

4639. Of course, that is not my position. I fully admit the absolute right of your company to carry on its business exactly as it pleases, but I maintain that the interests of the public will be best served by competition which will enable other men to compete with you on whatever system they please. You have given the strongest evidence against the feasibility or the possibility of a certain plan laid out by General Webber, supported by certain other engineers, and I ask you: Are you aware that that has latterly under the spur of competition been the very system that has been adopted in Stockholm?—No, I am not aware of it.

4640. Is there any reason why the Post Office should interfere to prevent, by refusal of a license, competition or amendment by a better system in this country?—I cannot venture an opinion upon the discretion of the Post Office. I think if the Post Office by law are in possession of a monopoly of telephones, they have a right to make their own terms.

4641. That is quite true. Now we will just go to another point about "their own terms"; they have made their own terms by this agreement?—Yes.

4642. And they strictly reserve to themselves the

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the right of granting competing licenses?—They do.

4643. Mr. Lamb, whom we examined, or who was a witness on behalf of the Post Office, said (I think I can almost quote his own words), that the Post Office was certainly not in law, on the strictest interpretation of the agreement, in any way debarred from granting competing licenses, and that it was under no obligation, even in honour, not to grant competing licenses?—I believe they are absolutely free.

4644. You agree with him that there is not even an honourable engagement on the part of the Post Office not to grant competing licenses?—The Post Office are absolutely free. I will go a little further and say that in all the negotiations (which were prolonged) there never was the slightest suggestion, directly or indirectly, of any such cession on the part of the Post Office of a promise or pledge to lock up their own discretion; on the contrary, from the very beginning to the end, it was strictly reserved; therefore they are quite free.

4645. That bears out exactly the Post Office statement of the arrangement; you talk about wages: What is the salary of your telephone clerks, who are ladies, I suppose, chiefly?—Yes. The wages vary from 5*s.* for young understudies (who, of course, have to be taught) up to 17*s.*, and I think you will find that is less than is paid in some places and more than in others.

4646. It gives here the wages at from 2*l.* 4*s.* 1*d.* to 2*l.* 15*s.* 7*d.*?—A month.

4647. A month?—Divide that by four.

4648. That is very much about the same as yours?—Relatively, no doubt, it is a higher wage, because the money will purchase more in Sweden than it will in London.

4649. Oh, yes; it is merely a matter of the relative cost of wages?—Yes; but that is a very small portion of the wages.

4650. We will go through a few of the wages; what hours do your young ladies work?—Eight hours, with an interval for luncheon, and another for tea, or dinner, rather, and tea.

4651. The hours, then, would be about the same; they are about seven hours there?—Yes.

4652. Your lady superintendents; I suppose you have lady superintendents?—Yes; it is about two guineas, I think, we give them.

4653. A week?—Yes. Then they are a rare class; they are worth a great deal more for some things.

4654. Then, your wiremen, for instance; what would their daily wages be?—Six shillings a day.

4655. There you are considerably over Stockholm?—Yes; you may take it from me that for all work of that kind, all mechanical work or skilled labour, we are at least 33 per cent. higher than in most European countries. I know it by my connection with the railways.

4656. *Here* we have a system of twin wires embracing over 8,000 subscribers on the General Company's system in Stockholm and a couple of thousand more outside, that is about 10,000, and the total value of the company's Stockholm system, at December 1893, was 2,600,000 odd



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kroner, and of its country system 1,018,000 odd kroner, making a total of over 3,000,000 kroner, or 165,890*l.*; that is a very much smaller estimate than you give in your prospectus of the New Telephone Company?—Yes.

4657. They have actually done, upon one-third of the money there set forth, what you decided it was absolutely impossible to do, in the terms of your own prospectus?—Yes. That does not convey much to my mind. Look at the elements of cost: railways in Sweden cost 5,000*l.* a mile; in England they cost 50,000*l.* Poles grow in Sweden; I have seen telegraph wires on living trees at the edges of the forest. We do not grow poles in England; we buy them, and very expensive they are too. I mean the elements of cost are so different that it is ridiculous (I beg your pardon, I am thinking now of the author of the book) to compare things which are utterly unlike.

4658. Of course we have your view upon that subject; you have already stated it; and what I wish is, to get a few facts from which those of us who do not quite agree with you may form our own deductions; what have the dividends of your company been?—We have debentures at 3½ per cent.; we have a very small sum (300,000*l.*) of first preference at 6 per cent.; we have a considerable quantity of second preference at 5 per cent.; and we pay a steady 5 per cent. dividend.

4659. And *this* general company pays 8 per cent., besides creating a renewal fund as you do, and a reserve fund as you do, a renewal and deterioration fund as you do, an assurance fund, of course, as you do, an accident fund and an employés' benefit fund, as I presume you do?—Then I wish now the analogy applied in this case.

4660. Probably, if you had adopted the New Telephone Company's prospectus you might have been earning the 8 per cent; you do not think so?—Well, you see, I have not seen their accounts. Figures are susceptible of various treatments.

4661. If the Committee will give them the opportunity of producing their balance sheet you and we can do so?—Yes.

*Chairman.*

4662. Do you know whether the Stockholm Company is limited to a term of years?—That, sir, is a material point. I think Mr. Bennett's book will tell you. We sent him out to Sweden to get a report. *That* is our report printed in another shape.

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4663. That adds to its value probably; it is most interesting?—Of course it is rather material to know what is the length of the tenure.

4664. What is the amount of your sinking fund?—Well, it would take a very large sum; but then before I can answer that, I must know what is going to happen.

4665. You do put away money; you have got a 16 years' license, and, as I understand, you make provision for the extinction of your capital in 16 years?—Why should we? You "understand" something which is not the fact.

 4666. You

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4666. You must understand I am not criticising it; I understood that was so?—I am most anxious upon that subject; it is one of the things upon which my mind has been engaged for several years, and I have sleepless nights over it.

4667. What do you do?—I cannot discount the unknown. Before you talk of a sinking fund you must know what the sum is that is to be sunk. Can you tell me; can anybody tell me?

4668. I simply wish to know for information, whether you before declaring profits put away any money for sinking fund, and if so, how much, and on what principle?—Yes, we do put away money; we have put by about 320,000*l.* so far, but we have not called it "sinking fund."

4669. What do you call it?—"Reserve."

4670. "Reserve fund;" then you do not have any fund that you do call "sinking fund"?—No, we do not call it "sinking fund"; but if we do "sink" there is the fund.

4671. Yes, it will float?—Probably I might shorten the thing by this: If you, or any other people, or any municipality who have embarked upon this enterprise, can solve this question, it may assist me. The possibility of getting the money turns upon the length of the tenure and upon something more, not only the length of the tenure, but the character of the bargain at the end of the tenure, as to what is saved for you; what you get I do not know, what we are to get nobody knows. Then how can we form an adequate idea of a sinking fund?

4672. You find some fault with the County Council's estimate?—I do not "find fault."

4673. You pointed out what omissions their engineers had been guilty of; but they in their estimate make a provision of 19,600*l.* for "sinking fund and interest"?—They may make a provision, I do not know what the value of it is until I know a good deal more about the facts.

4674. I do not wish at all to criticise your method of keeping accounts; as I have told you, I do not wish to criticise either your method of carrying on the business, or your perfect right to act upon your——discretion.

4675. Knowledge and belief of what is right and wrong; and about this thing that we call "sinking fund" or "reserve fund," I only wish to know, for information purely, whether you put it by with any reference of ratio to your capital, and to the termination of your license?—Yes, I quite understand the application of the question, and the wisdom of it, but I want the factor.

4676. I cannot give you the factor, but do you put away a given sum, we will say, of 1 per cent. or 2 per cent., or do you simply put away to reserve fund what you think you can spare?—About 60,000*l.* a year we put to reserve.

4677. And that 60,000*l.* is not worked out on the basis of your capital, or as bearing a certain proportion to your capital, but simply as a sum which in your judgment it is wise to put to reserve fund?—No living creature can tell what is going to happen in this business between now and 1911. The Post Office cannot tell; we cannot tell. Of course, if the assumption is that at the end of that term the whole of our capital is lost, and that were realised, it would be a very serious thing. If there were a *possibility* of that it would be very serious. Of course that is too chimerical for serious consideration; but you will find it a great difficulty when you come to raise money to go into this business on a short tenure. We have raised ours and spent it.

4678. You have got, at all events, some 300,000*l.* of a sinking fund?—Yes; I am looking, if you will allow me, for the precise amount. It is about 300,000*l.*

4679. And your total capital is what?—£5,000,000, about.

4680. Mr. Preece gave us a number of reasons against competition in telephone areas, and among others, he pointed out that it would be a great inducement to a strong company like yours to go in and undersell or "cut" the rates in any town which received a competing license; that course was pursued in Plymouth, but you repudiate the responsibility for adopting it?—It was a small local company at that time.

4681. Then it was a small local company that beat the Post Office out of the field by cutting down the rates in this one town?—Yes, it was a a very small thing at the time.

4682. Had it any other resources of revenue to tap besides Plymouth?—No, I think not. If you wish me to go into it I will do so. It is so remote and so small that I had not gone into it.

4683. That is not a system the practicability of which (given that the Postmaster has a free hand) will commend itself to you, is it?—I do not quite follow; starting a competition do you mean?

4684. No; I wish to take the commercial feasibility; in case of Glasgow getting a license, Mr. Preece assumed that a strong company like the National Telephone Company would come down and cut its rates to an utterly unpayable sum and starve the new company out of the field; do you think that that could be done if the Postmaster General had the right to grant, or if the Postmaster General adopted the policy of granting, competing licenses all round?—Really, I cannot answer for the Postmaster General. Of course, if he grants a license for any centre and the licensees get their money on conditions similar to our license, and a 17 years' run without any agreement or definition of what is to happen in respect to the going concern at that date (if they get over that primary difficulty, which they cannot and will not), then I should wait and see what arose.

4685. I am very glad I have been the means of drawing that expression from you; you say that they cannot and will not get over the difficulty of raising capital on the same terms as you?—I do not think so.

4686. Therefore, is there any necessity for the Postmaster General adopting a policy of refusal to issue licenses to, for instance, responsible bodies like the Corporation of Glasgow, who ask for them?—I think that the Postmaster General would be justified in considering the point of whether the corporation were likely to raise money upon terms. Of course, if a corporation wished to pit themselves against an existing company and upon rates to enter into a competition

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competition, regardless of profit and loss, that would be a different thing.

4687. We may put aside the question of the rates, because in the case of Glasgow they express themselves absolutely decided that there shall be no call upon the rates. You think if the call upon the rates were forbidden they could not get the money and could not go on?—I am quite sure (of course, one is always sure, but I am quite certain) that as regards any attempt to raise money on our existing tenure, for a short term of years, upon the usual method of the issue of prospectuses and the preparation of them by financial agency, it would be utterly impossible at this moment.

4688. They are equally sure, apparently, that they could carry out the intention embodied in their application for a licence, and I presume that that is a matter which might be allowed to settle itself by public opinion, the money market, and competition?—Well, that is one way of settling it; but Parliament, you know, would have to be invoked, and they, notwithstanding the Postmaster General's licence, might not feel inclined to authorise a corporation to go into ventures of that sort.

4689. That is quite true, and that is a matter that would have to be considered afterwards?—No financial combination would venture upon such a thing, because it would be in the highest degree improvident to do it; and I do not know that when a corporation gets before a Parliamentary Committee it is in a very different position to any other promoter of a scheme of that sort. If it is an unreasonable scheme they are not likely to get assent to it.

4690. We are merely discussing the preliminary step of the policy of refusing or granting licences for competition to public bodies or other responsible corporations?—I do not think you must ask me for an opinion upon the subject, because my natural bias is against granting licences in competition.

4691. That is perfectly true, and perfectly right?—I think if the licence is granted in competition with the object of driving the company out of the field, it is not a creditable ground for an application.

4692. Talking about competition, you promised the other day to get some details concerning Dundee. Have you got them?—I have; but I do not think they are in a shape that is very intelligible. Such as they are they are here.

4693. Have you got copies?—Yes. [*The document was handed in.*] There are certain facts, sir, on that paper. I do not know what you wish to get from me upon it.

4694. You volunteered to speak upon it, and I thought you were going to do so. We have had Sir John Leng's evidence about it, which you have seen?—Yes; you have also had the evidence of the gentleman who was chairman of the company, and he told rather a different story to that of Sir John Leng. He was a gentleman who came rebutting the evidence of the inefficiency, &c., &c.

4695. As a matter of fact, during the time of the competition Dundee was, I think, next to London, the most numerously-telephoned town in the kingdom; is not that so?—Now let me see: The Dundee Company, I see, had 332 subscribers when they were purchased, and the National Company at the date of the purchase had 642; therefore, they had, you see, 1,074 people on the exchange system.

4696. I do not at all hold by the success of the other company; I am speaking of the public convenience. The result of competition was to cut down the price. You will admit that?—Oh, yes.

4697. Largely to reduce the price to the public and largely to increase the number of telephone users in Dundee, on whichever company's exchange they were?—That is the underlying motive in the promotion of many of these things; the underlying motive in starting a company is to cut down the price. Dundee is a very good illustration.

4698. Then there is another illustration?—Would you allow me just to finish? Dundee had its competition; we progressed more rapidly than they did, notwithstanding our higher rate and the competition in Dundee; but it ended in, what?

4699. You say notwithstanding *your* higher rate; they had the higher rate?—Yes, they had a slightly higher rate. But what did it end in? The purchase of the whole machinery of the Dundee company, which was erected to sell, not to keep.

4700. It was sold?—It was sold; and within a very short time of its being sold, it being so flimsy in construction, it had to be bodily taken down and re-established. That is what it was put there for.

4701. They may not admit that?—They would not now, because they were handsomely paid out.

4702. They were handsomely paid out at a very considerable profit to themselves?—I daresay a fair profit, that is what they went in for; but they built a flimsy structure in order to cut down our prices. They succeeded. They kept the competition going long enough, and they were bought out, and the result of being bought out was that they made a very good profit upon a thing of such value that we had immediately to pull it down and to reinstate it.

4703. I will take another point in connection with it. When their competition started, the charges were, I think, 15*l.* or 20*l.*; at all events, they were pretty high?—They began in June 1880.

4704. You speak for the company, I suppose, as having taken it over?—It was taken over really by a Scotch company at that date (we absorbed all these things later on in the greater company), and that is why I am not quite so familiar with some of these details as with those of the larger ones.

4705. I do not wish to press you about details; the point is simply this: As a matter of fact when they started the price, I think, was stated to be 20*l.*?—The Dundee Company.

4706. When the Dundee Company (the company that you bought up) was started the subscription was 20*l.*?—Yes. What it was at the end of the term when we bought them is shown in the table just handed in. I do not understand

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understand it; but I see here some figures as to the analysis of the rates paid by the Dundee Company's subscribers at the date of the purchase. There is one at 2*l.* 10*s.*; two at 3*l.*; nine at 4*l.* 10*s.*; three at 4*l.* 13*s.* 4*d.*; and so on, and so on.

4707. The effect of the competition was to cut down the rates until you were running at 5*l.*, and they at 5*l.* 10*s.*, or something like that?—Something like that.

Mr. *Grant Lawson.*

4708. The Dundee Company were started before the National in Dundee, were they not?—They were. They started first. The National Company started in Dundee; it was a Scotch company. The company, which had a Scotch area, was opened in July 1881; the Dundee company opened about June 1880; therefore, the operation of the competition seems to have been the other way; we cut down their rates apparently.

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4709. The "D and D Company" I cannot identify with the many migrations that the soul of the company appears to have had; but, at all events, there were two companies, one with a high rate, and another which came in with competition; the result was to cut down the rates materially?—Yes.

4710. And when the amalgamation took place, it is stated here (are you in a position to contradict it), that the amalgamation was accompanied by a condition that the purchasing company should not raise the price above 10*l.*, which was about half what the price had been when the competition was not in force?—I am not absolutely informed, but I will have the papers looked up and submit them to the Committee. I daresay there was, as a condition of purchase, some stipulation.

4711. It will be very simple to let us have the agreement?—Yes.

4712. Now take the case of Manchester. I think the company that introduced competition there was called the Pioneer Company?—Was it the Pioneer or the Mutual. The Mutual, I think it was. We have had three transformations of it; the Mutual began it.

4713. The Mutual began it; then the Pioneer bought it up; is that it?—The Pioneer, no.

4714. Then the New Company bought that up?—There was an intermediate stage between the Mutual and the Pioneer; the Investment and General Electric; so that the capital was rolled over three times.

4715. That appears to be a favourite system of financing with telephone companies?—With telephone companies started on that principle, yes. That is what they are started for.

4716. The result has been that of a rolling snowball, so that at last, I suppose, there is a very large accretion of capital in the long process of rolling?—Of course, with such people they do not go in for nothing; they go in to sell their "razors."

4717. Well, take the Manchester "razor." I have before me a copy of a letter which was addressed by Mr. Provand (of whom we have

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heard) to the Chairman of this Committee, and I shall ask you some questions about what he says about the company. Mr. Provand, I believe, was one of the "getters-up" of the company?—He was the chairman of the Mutual, I almost fancy.

4718. He says: "That the Mutual Telephone Company was established by Manchester merchants on account of the bad service and exorbitant charges made by the National Telephone Company." That, of course, we do not ask about. He says: "That it erected a double wire exchange for a capital outlay of between 16*l.* and 17*l.*", that is per subscriber?—Yes.

4719. Can you credit that, or do you think it is likely?—Coming from Mr. Provand, I must credit it.

4720. "That its subscription of 5*l.* to shareholders and 6*l.* to non-shareholders was ample to supply service and pay a fair rate of interest on the capital. That the Mutual Company compelled the National Telepone Company to reduce its rates by one-half over the chief business parts of England and Scotland; in Manchester first, and latterly generally. What were your rates (do you know) in Manchester before it started?—Yes; I think I have reported that they have been as high as 20*l.*, reduced to 15*l.*, and subsequently to 10*l.*

4721. Then he goes on to say: "That on account of the Mutual Company's limited capital (the total amount called up was only about 36,000*l.*), it was unable to attempt competition in London, and consequently rates have never been lowered in that city"?—There you see he is not quite correct.

4722. "That on account of its limited capital, the Mutual Company sold its exchange and business to the new Telephone Company, which was brought out by Messrs. Rothschild for the net cost and interest, at the rate of 10 per cent., and under a deed binding the new Telephone Company to carry out the Mutual Telephone Company's policy, and establish double-wire telephone exchanges in other towns at low rates." Is that a fact?—There is a deed; yes.

4723. You could let us have it?—No, I do not think we can; it does not belong to us.

4724. May I ask who it belongs to?—It belongs to the New Company.

4725. Who is the representative of the New Company?—The liquidator.

4726. You say that it is not a public deed?—No.

4727. You are the shareholders, are you not?—We are the shareholders, but the company is in liquidation, and you know how important a liquidator is.

4728. I know the company is in liquidation, and that is a great bar?—I should be sorry to pursue the story of the Mutual too far, because it would involve very disagreeable features.

4729. I do not wish to pursue the thing more than it bears upon our own point. The assertion here is that "the Mutual Company sold its exchange and business to the New Telephone Company, which was bought out by Messrs. Rothschild for the net cost and interest, at the rate of 10 per cent., and under a deed binding the

Sir *Charles Cameron*—continued.

the New Telephone Company to carry out the Mutual Telephone Company's policy, and establish double-wire telephone exchanges in other towns at low rates"?—Yes.

4730. Is there nothing within your knowledge on that point?—Oh, yes, there is something within my knowledge. Manchester was put under an 8*l.* rate for the area served by the Mutual Company, but Manchester served by the other company at the higher rate liked that higher rate. I have put in a table showing the number of subscribers.

4731. Yes; I saw that there was a larger number at the low rate, if I remember rightly, than at the higher?—Is that so? I do not think you will find that it is so. I think it is just the other way.

4732. "Analysis of rates paid by New Company's subscribers." Is it Article 8 of No. 2?—No. 2; yes; Article 8 gives the analysis.

4733. That shows that there were 501 subscribers at 10*l.*; 20 at 8*l.*; 709 at 6*l.*; and 119 at 5*l.*?—Yes.

4734. That is to say, there were 521 at 8*l.* or over, and 828 at 6*l.* and under?—Yes. The 119 at 5*l.* were people who were to have a service at 5*l.* in consideration of taking a share in the undertaking.

4735. I know that?—But allow me; the 709 at 6*l.* were the general public who were persuaded to join the exchange in virtue of the reduced rate; and the 20 at 8*l.* are there in virtue of the agreement which said that at no time was the subscription for that exchange to exceed 8*l.*; and the 501 are the people who found that stipulation at 8*l.* for the service of the Mutual Company in Manchester so onerous and unsatisfactory that they transformed themselves into National Company's subscribers at 10*l.*

4736. But the fact remains that you had 521 subscribers at 8*l.* and over, while you had 828 subscribers at 6*l.* and under?—Yes.

4737. I am referring to Manchester here. You have told us that the Mutual Company, in being bought up, made a bargain which secured a low charge for its customers?—For a limited service.

4738. For a limited service?—Yes.

4739. That is all right: which secured a low charge for a certain service to its customers in Manchester?—Yes.

4740. But the allegation of this letter is that it also made a contract with the New Telephone Company, binding that company to establish double wires and telephone exchanges in other towns at low rates?—Yes.

4741. You are not aware of that point?—I have a general idea about the nature of the agreement, but the liquidator is in charge of the thing, and whatever it is worth, there it is. The company utterly failed in the carrying out of it. It was a service which the Manchester people did not appreciate upon those terms.

4742. The figures here will inform us?—You can see quite easily. Notwithstanding the fact that they had the sympathies of a great number of people behind them in Manchester at the low rate, we made much more progress in our figures at the high rate than they did at the low rate. A very considerable portion of the people who



Sir *Charles Cameron*—continued.

had been, shall I say, persuaded to go in at their low rate, had to continue as subscribers to us at the high rate; they found the service so limited.

4743. We are now talking about different things?—Oh, no! we are talking about the same thing.

4744. No; I am talking about the obligation of the New Telephone Company with regard to other towns to carry out the Mutual Telephone Company's policy and establish double-wire telephone exchanges in other towns at low rates?—Then, sir, I must respectfully decline to discuss that matter further, for the reason that their affairs are in the hands of the liquidator, and questions under that agreement will probably (most likely) be the subjects of legal procedure.

4745. The point is this: that assuming that to to be true, you have got the case of the Dundee Company, which sells itself, with a proviso, guarding what it considers the public interest; you have got the Mutual Company, which sells itself, with a proviso also, which it believes to be guarding the public interest?—Yes, it is not a matter of what "it" believed, it is what the public believed. The public did not appreciate the boon; they are sometimes ungrateful.

4746. Did the public ever get the chance?—Why, of course; it went on ever so long; until very recently.

4747. In Manchester; but we are talking about "other towns"; we are talking about more than you "decline to discuss"?—What other towns did they start in, sir.

4748. That is exactly the point?—Then I can relieve you. None, except Bolton, where there were four or five subscribers only; a very limited number.

4749. The Mutual Company did not start in any town?—Oh, yes, it did, I think.

4750. The Mutual Company sold itself to the New Company, as the chairman of the Mutual Company alleges, "under a deed binding the New Telephone Company to carry out the Mutual Telephone Company's policy, and establish double-wire telephone exchanges in other towns at low rates"?—Now I find the Mutual Company Exchange was opened the 28th February 1891.

4751. We are not talking about that?—I thought you said the Mutual Company never attempted any business.

4752. No, I did not say that. In other towns, I am talking about. You say there was nothing done by the Mutual Company in other towns?—No.

4753. That is the fault of the Mutual, I suppose, if there is any "fault." According to this covenant, the National "took over the New Company subject to the obligations of the agreement the latter had made with the Mutual Company." That is the allegation of the chairman of the Mutual?—I cannot make any explanations of the allegations of the chairman of the Mutual.

4754. Having been in it so long I thought possibly you might continue conversant with it?—No. I do not think I can express any opinion upon that. We shall certainly not take the view (in the National) of the chairman of the Mutual.

4755. Can you let the Committee form its own view by letting us have the agreement on which

Sir *Charles Cameron*—continued.

you did take the Mutual?—I do not think we can. I take the liberty of just suggesting to the Committee the very unfair position in which our company are placed by this sort of procedure. These facts, may be (I do not say, of course, on the part of the honourable Member himself) being elicited to make use of in litigation hereafter; therefore I am obliged to reserve my views upon it. We have no right to be prejudiced, even by questions put in a Parliamentary Committee. I say that with great respect from much experience of that tribunal.

4756. I should be very sorry to ask you anything that would prejudice your case before a legal tribunal. The production of documents which may come before a legal tribunal cannot prejudice you. I should prefer the production of the documents to any comments of yours upon them; perhaps you can oblige us with those documents?—I must respectfully put this to the Chairman: I should like to know what the view of the Committee is about that. Of course, if the Committee think it is a fair thing; if the Committee think the prejudice which may be brought about in future legal proceedings against the company by production of documents here——

Sir *Charles Cameron*—continued.

*Chairman.*

4757. As I understand, you object to produce certain documents which you have been asked to produce?—Yes.

4758. On the ground that they may prejudice the National Telephone Company, which you represent on this occasion, in possible litigation hereafter?—Yes.

*Tuesday, 28th May* 1895.

MEMBERS PRESENT :

Mr. Baird.
Mr. Benn.
Sir Charles Cameron.
Mr. John Ellis.
Sir James Fergusson.
Mr. Grant Lawson.
Mr. Arnold Morley.
Mr. Snape.
Mr. Solicitor General.
Lord Stanley.
Mr. Tully.

THE RIGHT HONOURABLE ARNOLD MORLEY, IN THE CHAIR.

Mr. JAMES STAATS FORBES, again called in; and further Examined.

*Chairman.*

4759. I UNDERSTAND, that with reference to the document to the production of which you objected upon the occasion of the last meeting of the Committee, in deference to the expression of the Committee, that, on the whole, it would be better the document should be produced; you withdraw your objection?—Entirely, if that is the wish of the Committee, and I will hand the document in.

4760. You will hand in a copy?—Yes, a copy. (*The document was handed to Sir Charles Cameron.*)

Sir *Charles Cameron.*

4761. Perhaps you will show me the clauses that relate to the question. If you will do that it will save my wasting the time of the Committee in looking for them?—What is the particular point you were asking about?

4762–3. The alleged stipulation under the agreement that the New Telephone Company should erect cheap double-wire exchanges in other towns, under a penalty?—Yes, that is so; and also about a limitation of rate, I think?

4764. Yes?—This is an agreement which, by descent, after passing through several stages, came into the possession of the New Telephone Company. It is an agreement between Swindells, of Portland-street, Manchester, on behalf of the Mutual Telephone Company, Limited, and the Electric and General Investment Company. It stipulates, amongst other things, for the transfer. They shall "complete as a part of the business purchased the Vendors' Exchange System in Manchester, as already designed on the metallic-circuit principle, so as to meet the requirements of, in all, 2,500 subscribers, and the purchasers or other the transferees of the said business will not for 10 years from this date raise the charge for an ordinary exchange wire to a private subscriber communicating between one part of the Manchester district and another within a radius of three miles from the Manchester Infirmary, above 8*l.* per annum per exchange wire." That is one of the stipulations. Then the other is,



Sir *Charles Cameron*—continued.

"This agreement has been made with the intention that telephone exchanges on the metallic-circuit principle shall be developed and extended. And, accordingly, if the transferees of the business shall at any time within 10 years from this date sell such Manchester business to, or amalgamate the same with, any other company which shall at any time within such 10 years conduct any telephone exchange in Manchester or London on the earth-circuit or single-wire principle, or shall, without going into liquidation, discontinue the said Manchester business, they shall pay to the vendors the sum of 15,000*l.* as additional purchase money." Those are the two particular items.

4765. You have read, I think, No. 10 and No. 12; I might ask you to read No. 11?—If you please: "The purchasers or other the transferees of the said business shall (unless in their opinion good and sufficient reasons shall at the time exist for not doing so) in any case in which within two years from this date any town in Lancashire or Yorkshire of sufficient size, and with pledged subscribers to a sufficient extent to justify the expenditure with a reasonable prospect of a remunerative return on the capital outlaid, shall desire the erection of such exchanges as hereinafter in this clause mentioned, erect or cause to be erected telephone exchanges on the metallic-circuit principle in such town, provided two-thirds of the capital required for the purpose shall be subscribed locally or otherwise, and unless, in the opinion of the purchasers or other the transferees of the said business, there shall be a good and sufficient reason to the contrary, shall within two years thereafter provide inter-town communication on that principle between such town and the other exchanges of the purchasers or other the transferees of the said business."

4766. You describe that as a very curious proviso?—Yes; I think that is a curious proviso. I should think it provides, "How not to do it."

4767. That does not refer to Article 12, which runs in this way (I think you read it): "This

Sir *Charles Cameron*—continued.

agreement has been made with the intention that telephone exchanges on the metallic-circuit principle shall be developed and extended; and, accordingly, if the transferees of the business shall at any time within 10 years from this date sell such Manchester business to, or amalgamate the same with any other company which shall at any time within such 10 years conduct any telephone exchange in Manchester or London on the earth-circuit or single-wire principle, or shall, without going into liquidation, discontinue the said Manchester business, they shall pay to the vendors the sum of 15,000*l.* as additional purchase money." That practically bears out, I think, what Mr. Provand said in his letter to the Chairman, from which I examined you?—Oh, I forgot that letter.

4768. What Mr. Provand says is: "For the net cost, with bare interest added and without profit of any kind, the Mutual Company's directors, in good faith and belief that they were doing the best they could in the interest of telephone users, sold their exchange and business in Manchester to the New Telephone Company, by an agreement by which the New Company bound itself under a penalty of 15,000*l.* to carry out the policy of the Mutual Company, and to erect double-wire exchanges in other towns." That is practically what is the effect of the agreement, is it not?—That agreement, you see, is not with the New Company.

4769. The agreement, you say, descended to the New Company?—Yes.

4770. The New Company was the company with whom this agreement was made, subject to the obligations, of course?—Yes. There was a "Pioneer Company" founded on that, and the New Company became seised of the Pioneer Company, with their obligations and business, and it remains the property of the New Company, who are in liquidation.

4771. It remains the property of a company which is in liquidation?—Yes.

4772. And of which the National Company possesses all the shares?—A considerable portion of them, yes.

4773. I thought you told us the other day it possessed all the shares?—Nearly the whole of them. Some of the gentlemen interested in that 15,000*l.* are holding out.

*Chairman.*

4774. It has a controlling influence over the shares of the New Company?—Yes; but the New Company itself is in process of liquidation.

Sir *Charles Cameron.*

4775. Mr. Provand's complaint is that "the re-establishment of the monopoly by the Post Office enabled the New Company to obtain an enormous profit by, in effect, selling itself to the National Company, then going into liquidation, and thereby evading the terms of the agreement." Of course I do not ask you to express any opinion upon that?—No, you must not.

4776. But I suppose that is the position taken up by the other gentlemen you speak of as interested in the 15,000*l.*, and holding out?—I do not know what they are proposing to do; they have made no advance, as I understand, at present.

4777. Is Mr. Provand one of these gentlemen, do you know?—I do not know that he is interested now.

4778. Mr. Provand informs me (it was in some Minutes of Evidence that he proposed to give) that he was offered a directorship of the National Telephone Company about that time, and so strongly did he feel upon that point that he refused it?—Mr. Provand?

4779. Is that so?—Not within my knowledge.

4780. Is it within your knowledge that he was offered a managing directorship of the New Telephone Company, and refused it?—It is not within my knowledge.

4781. We will come to another point. I gave you notice the other day that I should ask you some questions about the financial positions of the company; that is to say, the capitals of the different companies absorbed by the National, and you said you would be good enough to look into the matter?—I have looked into it; I am quite familiar with it.

4782. Did you prepare any statement?—I do not know what the feeling of the Committee is about that; whether that is within the reference. I am entirely in the hands of the Committee; if they think it desirable to go into a very long story I shall be happy to go into it.

4783. You have evidently prepared something, therefore I think it better to allow you to give it in your own way; I do not know which end you will commence with?—I will commence with the whole of the companies, showing what their capital was, what it is, and how it is merged into the entire capital of the United Company, as it is all one thing now they are all in:—The National Telephone Company, the United Telephone Company, the Lancashire and Cheshire Telephonic Exchange Company, the Northern District Telephone Company, the South of England Telephone Company, the Western Counties and South Wales Telephone Company, the Sheffield Telephone Exchange, the Caledonian Telephone Company (which was a private company), the Universal Telephone Company (that was private), the Isle of Man Telephone Company (that was a licence), the Telephone Company of Ireland, the Thanet Telephone Company, and a small concern called the Home Telephone Company, which was private wires. Now the National Telephone Company, "Expenditure," "Construction Outlay," 404,851*l.* (we will leave out the shillings and pence, I think); the United Telephone Company, 673,705*l.*; the Lancashire and Cheshire, 274,031*l.* Those are the three companies which, after working in their various areas for a certain number of years, were fused, and they were fused on the principle of market value. A great number of methods were suggested. We tried to find, through a great London accountant, a method of appreciating their values with reference to the capital that had been spent, the profits made, and so forth. After waiting for a year or more he gave up the task, and we cut the knot by looking at the market value. A negotiation ensued, and this was the market value calculation;

Sir *Charles Cameron*—continued.

tion: "Valued at amalgamation or purchased by National Telephone Company":—The National itself, 854,851*l.* 17*s.* 4*d.*; the United, 957,000*l.*; the Lancashire and Cheshire, 615,000*l.*

4784. What arrangements were there as to the division of the shares into preference and ordinary?—Perhaps I had better exhaust this, and then come to the whole capital account of the company.

4785. Take it in your own way?—That was the basis upon which they were brought together, amalgamated at the market value of the day. Of course, that is one method. There are other methods of assessing the value of a particular thing at a particular time as amongst partners. Northern District Telephone Company, 78,235*l.*, valued at amalgamation, 80,942*l.*; South of England, 84,916*l.*, valued at 150,000*l.*; Western Counties and South Wales, 185,366*l.*, valued at 277,607*l.*; Sheffield Telephonic Exchange, 38,696*l.*, that was taken at value.

*Chairman.*

4786. The par value?—Yes, at the value of the work; that is, what they had spent on the works, which we had acquired. The Caledonian (private wires), 4,235*l.* (the cost of that); Universal Telephone, 3,200*l.*; Isle of Man, 1,935*l.* 17*s.* 3*d.*

Sir *Charles Cameron.*

4787. You are only giving one of the figures?—There was no (what you call) "water" there. The Telephone Company of Ireland, 61,341*l.*, came in at 98,390*l.*; the Thanet Telephone Company came in at 20,100*l.* Beyond the promotion and the keeping it alive, they never spent a farthing; the Home Telephone Company, 2,648*l.* 19*s.* 9*d.* So that at that date, when these things were all absorbed, the total amount of money spent in the actual construction of the thing was 1,813,000*l.*; the amalgamation value and purchase value (those are the figures I read to you) was 3,105,000*l.* The difference (what some people are pleased to call the "water" value) was 1,292,000*l.*; I must take that over.

4788. Before you go further, will you explain to us the principle on which the amalgamation of the National, the United (I think), and the Lancashire and Cheshire was brought about. It was on the basis of the market value of the stocks, was it not?—Of that day?

4789. Yes, of that day; but as you went on you did not give us any information on that point. I was not able to follow your figures; I got one; for instance, the Irish Telephone Company, was that taken over on the same basis, the market value?—No, that was taken over on negotiation; all these were taken over on negotiation. The construction outlay was the amount actually raised in sovereigns, and in the shape of either debentures or preference stocks, by the people who conducted those enterprises; but when these companies were formed they received, or created, rather, a certain number of ordinary shares, which did not represent money raised in cash, but represented what the undertakers (the promoters) of these different companies had in reserve to turn into value out of the future profits



Sir *Charles Cameron*—continued.

of the undertaking. Of course, we intercepted the final issue of the thing by acquiring them in conformity with the desire that the whole thing should form one company, and that is what we had to deal with. The bare sovereigns spent was not the estimate of value. We had to compound with these companies for the value of their "open shares," as they called them, which represented the premiums paid, or rather, the discounts paid, to raise the capital; and that is the character of that "water," if it is called "water."

4790. You state, roughly, a million two hundred thousand?—£1,292,000. But now I must carry it on. Since these companies have been amalgamated under the National, beginning with the year ending 30th April 1890, up to the end of December, we have spent in sovereigns, 1,459,000*l.*; therefore, the "construction outlay" account (dealing with it from that point of view) was 3,272,000*l.*; the "book value," 4,565,000*l.*, which leaves what you call "water," if it be "water," 1,292,000*l.*, as against 4,565,000*l.*

4791. Have you done with that branch? You mentioned those various companies. The National at the time you spoke of, when it was of the construction value of 404,000*l.*, and the market value of 854,000*l.*, was not a simple company, was it; it had swallowed up some other companies, had not it?—The National? No. The National had a very large area, Scotland and some parts of the north of England, but they had been at work a long time.

4792. Exactly. I thought the Dundee Company had found its way in?—It found its way into the National; the National absorbed the Dundee.

4793. That is what I asked. Had the National previous to that time absorbed other companies?—Two or three small companies, the Dundee Company and others.

4794. And in connection with that there was a certain premium paid to the Dundee Company; would that figure be among the 404,000*l.*?—Yes.

4795. They absorbed the Glasgow Company, did not they, Graham's?—Graham's, they absorbed; yes. There there was a good deal of "loading."

4796. The "loading" there would appear amongst that 404,000*l.*?—Yes, but it is a very small sum in comparison with these large amounts.

4797. I merely wish to understand the principle; you have no note of the absorptions of each of those companies prior to their final absorption?—No.

4798. Then we will come to the other end of the matter?—It is a very simple principle. It suited the convenience of the National Company to buy somebody out to get rid of these enormous difficulties which it was in the power of a small competing company to impose upon the bigger company, and they bought them out. People do not generally accept that position without requiring some inducement, and they had to be bought out at a premium.

4799. Of course, I am not making the smallest adverse criticism upon your commercial policy,

Sir *Charles Cameron*—continued.

which I think was perfectly sound from your own point of view; but I wish to understand exactly what the amount represented by the 400,000*l.*, for instance, really was, what the material represented really was; and in every case, I understand, you take the purchase price of any company that was absorbed as the construction value?—Yes.

4800. Now, to go to the other end, about the New Telephone Company, of which you were also a director?—Yes.

4801. It bought up several companies, did not it?—Yes, it bought up the Mutual and the Stanhope, those were the other two outstanding companies.

4802. You have told us that in the transition from the Mutual to the New there was a good number of different other companies interposed?—There was the Pioneer Company.

4803. There was the Pioneer Company and some other company that that agreement was made with?—Yes. This was the General Electric Company, or some electric company. They were financial machines, invented by gentlemen in the city to raise the capital.

4804. Certainly; I suppose they were fairly successful. Who bought up the Pioneer Company?—The Pioneer Company, I think, was started by the New Company as a means of starting themselves, and the Mutual and the other obligations incurred between that agreement and the later one involved several other matters; for instance, city tubes was one of them. Five thousand five hundred sovereigns were paid by the company for the option of using the city tubes; a thousand pounds was deposited for the city tubes; they bought the Stanhope licence, and various other things.

4805. To come down to one particular point, they bought the Manchester Mutual Company?—Yes.

4806. I think it is stated at a profit of 10 per cent. above the cost price?—Yes.

4807. Well, that was not very much. The prospectus to which your name is attached was for a company which, I think, bought up the Pioneer Company?—Yes.

4808. At a profit of——?—Well, 90,000*l.*, less 3,000*l.*, I think; about 87,000*l.*; but that covered a great deal more than the purchase of the Mutual.

4809. But there was a considerable lot of "loading" in it, was not there?—There was some "loading," perhaps. I have got the particulars. For instance, the amount expended on construction to Manchester, Bolton, and Liverpool at the date of the purchase of the Mutual Company was 34,480*l.* That included the 10 per cent. paid the gentlemen who were good enough to get out of the way, and who will get their fingers (if they can get them) upon that 15,000*l.* I do not think they will get it. Since expended, 25,810*l.* That is between the date of that agreement and this transaction with the so-called "Pioneer." Now, here are some of the items which people who draw estimates and talk illusions do not understand. The original capital, including the acquisition of the licence (that is, of the Pioneer Company, whoever they were; the Duke of Marlborough's friends, that is who they were), 14,950*l.*; payment on account of options, City wayleaves, 5,500*l.*; deposit in connection therewith, 1,000*l.*; purchase of the Stanhope Company, including acquisition of licence, 3,375*l.* (it was made to sell); Stephens' claim on patents, 316*l.* 17*s.* 8*d.*; payment in connection with the issue of 732,000*l.* additional capital, 10,597*l.* (that was the commission paid to the eminent firm who issued the capital; very moderate); legal expenses and cost of the Act of Parliament, 2,497*l.* 3*s.* 7*d.*; bonus to shareholders of the Pioneer Company and expenses of liquidation of that company, 15,104*l.* 12*s.* 9*d.*; capital expenditure in London office, management, rent, canvassing, office furniture, and other charges in connection with the development of the company, 8,129*l.* 15*s.* 3*d.*; purchase of premises on Strand site, 26,357*l.* 2*s.* 5*d.*; preliminary expenses, 2,109*l.* 9*s.* 3*d.*; Notting-hill Electric Light Company, 250*l.*; Kensington and Knightsbridge Electric Light Company, 256*l.* Those are the details of the expenditure of the New Company, including the Pioneer, and all the money that they had (I was going to say "wasted") disbursed up to that date.

*Chairman.*

4810. What is the total amount?—£150,727.

Mr. *Tully.*

4811. How much did your company pay for that?—We subscribed 250,000*l.*

4812. For that 150,000*l.*?—Oh, we had nothing to do with this; this was part of the expenditure of the gentlemen we associated ourselves with.

4813. You bought them up?—That company?

4814. Yes?—We bought their shares, as opportunity offered.

4815. How much did they cost?—Some we bought at par value, some at a pound premium.

Sir *Charles Cameron.*

4816. At all events, the company was started, and you appear in this prospectus as nominated by the National Telephone Company?—Yes.

4817. You are on the board, not provisionally, but as nominated by the National Telephone Company, Limited?—Yes.

4818. Then at once I understand it was arranged to drop competition; in fact, I suppose that was the basis on which you joined?—I am very anxious that these things should be thoroughly understood, so perhaps you will allow me to read the agreement under which this thing was brought about.

4819. Certainly?—We had, of course, the prospect of fighting his Grace and his friends, and of upsetting the business in London by processes which we had had some experience of, and by wasting a great deal of money in order that at some future date we might combine. Well, I had had rather more experience of this sort of business than his Grace, and I talked to him very seriously, and I made him see what a reckless course he was entering upon, so we came to an agreement, and this is it: "Memorandum of agreement made this 14th day of July 1892, between his Grace, George Charles, Duke of

Sir *Charles Cameron*—continued.

of Marlborough (on behalf of the New Telephone Company, Limited), of the one part, and James Staats Forbes, Esquire (on behalf of the National Telephone Company, Limited) of the other part. Whereas the New Telephone Company has been registered under the Companies Acts, 1862 to 1880, with a nominal capital of 750,000*l.*, divided into 75,000 ordinary shares of 10*l.* each, of which 1,500 shares only have to the present time been issued, and 3,000 founders' shares of 1*l.* each fully paid up, all of which have been issued, and is possessed in addition to its own licence of two several All-England licences for telephonic purposes, viz.: The Mutual licence and the Stanhope licence being the only licences now current except those possessed by the National Company. And whereas it is believed that if an arrangement can be come to whereby the two companies can work their respective systems without rivalry, greater efficiency and convenience will be secured to the public, and beneficial results will accrue to both companies. And whereas as a basis by which to effect this object, it has been agreed that these presents shall be entered into." Then it goes on: No. 1, "The New Telephone Company and the National Company shall, so soon as definite arrangements with Her Majesty's Government have been made, surrender to Her Majesty's Postmaster General the licences held by them respectively, and in lieu thereof they shall respectively accept fresh licences from the Postmaster General in a form to be agreed upon between each company respectively and the Postmaster General." That was in anticipation, of course, of what we knew then to be the policy of the Government about taking over the companies on the theory of the purchase of the trunk wires and a revised licence.

*Chairman.*

4820. What date was that?—That was in July 1892.

Mr. *Benn.*

4821. That was prior to the signing of the agreement by the Postmaster General?—Yes.

4822. Then amalgamation had been decided upon prior to the agreement with the two companies?—This agreement for mutual working had been agreed to, not amalgamation.

4823. Mutual working?—Yes, mutual working. This is the agreement under which we became subscribers to the "New" capital: "The New Telephone Company will, through the medium of Messrs. N. M. Rothschild and Sons, or them failing, through some other channel to be agreed upon, issue to the public the whole of its unissued ordinary share capital, viz." (the New Company; they had only issued a very small proportion), "735,000*l.* nominal, and the National Company shall subscribe for at par, and duly pay for 250,000*l.* of such capital which the New Company shall allot to them accordingly. In consideration whereof the New Telephone Company will cause to be transferred to the National Company or its nominees on payment of 1*l.* per share, 1,500*l.* of the said founders' shares in respect of which the holders shall be under no further liability whatsoever. The board of the

Mr. *Benn*—continued.

New Telephone Company shall consist of not less than eight members, and one half of the board shall always be nominated by the National Company. His Grace the Duke of Marlborough shall be chairmain of the New Telephone Company, and shall have a casting vote on all ordinary matters of business. On all other matters (including the fixing of rates, making contracts, appointment of higher officials, and voting expenditure) the chairman shall have no casting vote. The Duke shall also be offered a seat on the board of the National Company. Both companies shall adopt the same scale of charge, and such scale shall not be varied except by a resolution passed by a majority in number of the boards of each of the respective companies, subject to arbitration in case of difference as hereinafter provided." *This* was one of the great benefits to them: "There shall be mutual intercommunication upon terms to be agreed between the subscribers and the exchanges of both companies and also over their respective trunk lines, and so far as practicable all matters in regard to such intercommunication and the working by the New Company of their business, shall be the subject of arrangement between the companies." Then in the case of difference a committee of the boards were to intervene, and if the boards could not settle it, then it was to be referred to Lord Balfour of Burleigh as sole arbitrator. Then: "In case Her Majesty's Postmaster General shall exercise the option which he may have of purchasing the business of both or either of the said companies, the companies agree that they will use their best endeavours to secure that the net earnings of the companies or company in respect of which the option shall be exercised, shall be the basis on which the sale shall proceed." Then "A more formal agreement" and so on.

Sir *Charles Cameron.*

4824. You went in and subscribed the 250,000*l.*, and a public prospectus was issued at the end of July 1892?—Yes.

4825. Was the capital fully subscribed?—Yes.

4826. That is to say, the 750,000*l.*, including your own?—Yes.

4827. You mentioned something about "founders' shares"?—Yes.

4828. I did not exactly catch what you said in that agreement?—There were 3,000 founders' shares, and those founders' shares carried a right to the contingent profits of the undertaking after, I think it was, six or seven per cent. had been paid.

4829. Seven per cent.?—Yes; and we thought, as we were going in for a considerable portion of the capital, we had better have some of the founders' shares.

4830. And you took them over at par?—We took them over at a pound a share, which we paid in cash.

Mr. *Benn.*

4831. Might I ask upon that, did not you, as a matter of fact, pay 40*l.* for each 30*l.* founder's share?—Yes, we did for the others; for the balance.

Sir *Charles Cameron.*

4832. That would bring up the capital of the company, I suppose, the money paid into the company, to about 800,000*l.*, or close on it; at all events, over 750,000*l.*?—Yes.

4833. Nothing was ever done, was it, in the way of operations of the company?—First of all, we had to get the money; then, having got the money, we had to consider what was the best way of applying it; and we found the best way of applying it was to do what we did; agree that the objects which mainly influenced the Duke of Marlborough would be the better carried out, more economically and more promptly, by the National Company doing them than by his company doing them; and in the midst of that he died, poor man.

4334. Then the progress of the company was such that this company, in fact, has never done anything?—Yes, they did something; they committed themselves to a good many items of waste, such as the tubes and the Strand site, and so forth; but they did no telephoning.

4835. But they did commit themselves previous to that, and previous to your joining, to the Telephone Users Association?—Yes, and to that large Bill which I have just put in.

*Chairman.*

4836. They did some telephoning in Manchester, did not they?—In Manchester; yes.

4837. You mean not in London?—Not in London; the Manchester operations are going on now, of course, to-day.

Sir *Charles Cameron.*

4838. When were they put into liquidation?—Quite recently.

4839. You say your company has acquired practically the balance of the 500,000*l.*?—Nearly the whole of the shares we have acquired, yes.

4840. Of course you do not get any interest on them?—Well, it is a part of our general capital.

4841. How does it stand in your capital; how do you take it in your capital?—That comes into our capital account.

4842. In what way; to what extent. You have told us you took the market value of certain shares, and that you took the agreed price of other shares?—This, of course, comes into our account at what we paid. Some of the shares were exchanged. A great many of the people who subscribed the money have exchanged their shares in the new company for shares in our company. There was a mere wiping out of one security and the creation of another; but those who preferred to take cash got cash; and we found sovereigns with which to pay them.

4843. How does it stand on your accounts now?—As part of our general expenditure.

4844. At what figure?—The money we have paid, or the shares we have paid for.

4845. That is 750,000*l.*?—It is as much as we paid.

4846. Then it is not in your published accounts, I presume, since you are not telling me exactly what it is. I do not ask you to answer the question unless you like, but what I thought I had clearly indicated that I wanted

Sir *Charles Cameron*—continued.

was the amount; the figure, the sum at which the thing stands in your company's books. Of course the balance-sheet is a different matter, but I asked whether it was on your published account, and if so, on what account?—The shares were 4*l.* paid up, not 5*l.* Part of those shares was converted into our shares at par; (National shares, 5*l.* shares); part was paid off in cash. That money we have paid off; we raised the money on our own credit, and it is in our capital account.

4847. But then it is an asset. The shares of the new Telephone Company, the 750,000*l.* which you hold, is an asset of your company?—Oh, yes.

4848. And I ask you what does it figure at?—Well, what we paid for it.

4849. Well, I know you have repeated that two or three times; but you have told us that you bought certain shares at certain prices; founders' shares at one price; some at 40*l.*?—I have not got it worked out.

4850. And it does not stand in your balance-sheet?—It is not in *this* balance-sheet. I will find it directly. You shall have the fullest information. There is nothing to conceal. If we had, in meal or in malt, to pay the 750,000*l.*, or rather, the difference between one's own subscription of 250,000*l.* and the balance, I thought that would have been a sufficient answer.

4851. My point is this. We will assume it stands (*seq.*) at 750,000*l.* in your books as an asset. That is unproductive capital, is not it?—Oh, no; we have got the valuable Manchester business.

4852. The Manchester business of the New Telephone Company was that of the Mutual Telephone Company?—Yes.

4853. And I thought that you did not consider that it had made a very valuable business?—I do not think it has; on the contrary. Still, for what it is worth, there it is.

4854. I think the expression you used was, that it was a business "made to sell"?—Yes, I think it was.

4855. And that the purchaser got a very rubbishy plant, at all events, for his money?—I do not think I said that of the Manchester, did I? I said that at Dundee it was a very rubbishy plant, so much so that within a year of our taking it over we had to reconstruct it entirely. Manchester was very well laid out, but rather temporary too; it was a poor business as long as it lasted, and is now.

4856. Your chief business in Manchester is your own business you have told us, I think?—Yes.

4857. At all events, there were between 500 and 600 subscribers on your entire system, 10*l.* subscribers?—On theirs.

4858. No, on yours?—We have 3,000.

4859. Five or six hundred of theirs; you are right?—Yes.

4860. But their Manchester business cannot bear interest on any material part of the 750,000*l.*, so that a large portion of the 750,000*l.* must be unproductive capital?—Yes, it is; 60,000*l.* is the Manchester bill.

4861. Then you may say practically there is 700,000*l.*

Sir *Charles Cameron*—continued.

700,000*l.* unproductive capital?—Yes, more or less unproductive.

4862. That is another burden which it has to bear in addition?—Yes.

4863. I see the Manchester business represents 60,000*l.* That would leave about 700,000*l.* which is unproductive, and has been unproductive since 1892?—Yes, if you put it in that way. But then you lose sight of the fact that we have gone on spending the money for those improvements in London, which if we had not done, they would.

4864. That is quite true?—It is a mere transition; it is going out of one pocket into the other.

4865. I have never criticised your financing; it is from another point of view I ask these questions. You are perfectly right in that. I am not at all insinuating that you are wrong in a commercial point of view?—I think I know what your point of view is; at least I think I can induct it, and if you will allow me I will come to close quarters with that at once. It is cheaper for us to have done this thing, and therefore better for the telephone subscribers than it would have been if the Duke of Marlborough and his friends had run "amuck" in London with us, to end in combination late instead of early. That is how I should defend this transaction.

4866. Then how would you defend this transaction; the issuing of this company with your name on the prospectuses, knowing that this company had been in the first instance floated practically, or the company on which this was based, on the terms of 1,700 subscriptions in consideration of reduced rates?—We knew that quite well; but, of course, we had to consider what probability there was of getting money if we had not been subscribers.

4867. My point in connection with that was simply this: It may be fairly argued (and I do not ask you to admit more than that) that what is called "watered" capital is capital which requires a heavier charge for telephones to enable you to pay interest upon it; and this is another piece of unproductive capital in addition to the other?—Obviously if we had had what we have got for a million less we should have been all that better off; but then, you see, the second man got it.

4868. That is true. You told us a minute ago that you were acquainted, when you were making this agreement with the New Company, with the policy of the Post Office as to the arrangement. Had the Bill come before the House at that time?—No, I do not think the Bill had come before the House as early as that, but of couse we had been in negotiation with the Post Office. We were in negotiation for some time.

Mr. *Tully.*

4869. Was the General Election over at that time?—Oh, no, it was before the Dissolution.

4870. It was over the 17th July, was it not?—Oh, no. The 11th August the agreement was signed. Sir James Fergusson was then Postmaster General.

Sir *Charles Cameron.*

4871. The Bill was passed in June, therefore you must have been acquainted with it?—Yes.

4872. There is another very important point, and that is this: What is the precise nature of your licence with the Post Office; it comes to an end in 16 years, does it not?—Yes, a little over 16.

4873. And then the Post Office is not compelled to buy you up?—No.

4874. There is no obligation there at all?—None at all.

4875. So that if there were two or three systems in one town, the Post Office would take whatever suited its purposes and leave the rest alone?—Yes.

4876. If it avails itself of any break before then it is bound to buy you?—Yes.

4877. To buy all your concern; is it on arbitration?—On arbitration.

4878. Was there any understanding that there should be a purchase at the next break?—None whatever. The licence speaks for itself. There it is. We go on; we have spent our money; we have got a tenure, and of course it wants a good deal of prevision and a good deal of courage to face that question. That is one of our difficulties that will find itself out by-and-bye.

4879. We understand there is not even an obligation on the Post Office to pay the old iron value of the system at the end of 16 years?—As far as I remember the licence, there is no obligation whatever; the licence expires by effluxion of time.

4880. I think, in mercy to you and the Committee, I shall not keep you any longer, except just to correct one or two points?—If you please.

4881. First about your foreign evidence. You mentioned the case of Amsterdam as a case that was on the same footing as London?—I thought it was a good parallel.

4882. You found fault with Mr. Dickson for saying there were 2*l.* telephones in Holland?—Yes, I did.

4883. You are not aware that there are some 15 or 16 towns in which they are worked by the Amsterdam company?—You mean Zutphen and those places, two or three outlying places, where amateurs have banded themselves together as shareholders, and provided a sort of amateur telephone.

4884. In a number of towns they have given the "amateur" telephone, which works satisfactorily, and gives a service to the town for 2*l.* a year?—I know, but if you go to a village and find one gentleman who is willing to take the risk of capital, another gentleman who is willing to act as secretary, somebody else who will act as something else, for nothing, I do not call that a commercial undertaking.

4885. I do not wish to raise a controversy about it. I wish rather to allow myself not to trouble other witnesses about it?—There are several other places where there are very large subscriptions.

4886. Of course one does not expect absolute accuracy in giving evidence like Mr. Dickinson, but I was a little struck by what he said about Holland, that there the subscription was 2*l.*, or something of that sort, and upwards?—Yes.

Sir *Charles Cameron*—continued.

4887. You said, I think, that there was no such subscription in Holland as 2*l.*?—Now would you allow me to suggest this: Was it a frank or fair way of suggesting to the Committee what the charges for the general conduct of the business was in Amsterdam, to come and say it was from 2*l.* upwards? Why did not he say it was from 9*l.* (or 20*l.*) at Amsterdam downwards to 2*l.* in some remote village?

4888. There is another point in connection with Amsterdam; you said the charge at Amsterdam was 9*l.* 14*s.* 2½*d.*; in which you are right; but are you aware that upwards of 2*l.* of that is royalty paid to the town of Amsterdam?—"Wayleave" I should have called it, not "royalty" certainly.

4889. It is licence duty; the municipal authorities, as you told us, have absolute power over the telephones, and they charge 2*l.* an instrument?—Yes, and then they provide wayleaves, or give the facilities of the Corporation for that purpose.

4890. They must give something for the 2*l.*?—Yes, but we pay royalties and wayleaves, too. But that, I think, is the only case in Holland.

4891. No?—I think so.

4892. I have here a list of 10 or 11 of such places: Breda, Deventer, Enschede, Leyden, Tilburg, and some others?—It may be so in some of the small Zuyder Zee towns or villages.

4893. As to what has been produced by other people in the United Kingdom; Graham's, whom you bought up in Glasgow, had a lower tariff than you, had not they?—I believe they had; but really I am not very familiar with that, it is so long ago.

4894. Messrs. D. and G. Graham, in Glasgow, charged 12*l.*; Charles Moseley, in Manchester, 8*l.*; Tasker and Company, in Sheffield, 7*l.*; the Globe Telephone Company, in London, 10*l.*; and Mr. Sharples, in Preston, 6*l.*; and these were bought up, as you have told us, at very considerable premiums?—Yes.

Mr. *Tully*.

4895. Can you tell me what is the total number of your subscribers?—Seventy-five thousand.

Sir *Charles Cameron*.

4896. About municipalities; you are aware that in Norway there is at least one instance of a municipality running its own telephones?—I do not know that.

4897. That is at Trondhjem?—I should like to satisfy the mind of the honourable Member by saying this: We have dealt with the average subscription, 9*l.* 2*s.* 2*d.* This is how the thing works out: Metropolitan area, 14*l.* 14*s.* 5*d.*—not 20*l.* as people are incited to believe; Manchester, Liverpool, Blackburn, Leeds, Bradford, Dundee, Glasgow, Edinburgh, Dublin, Belfast (that is a very good type of what we call cities and big places), 8*l.* 15*s.* 8*d.*; Norwich, Exeter, Chester, Bath, Ipswich, Worcester, Lincoln, and towns of that class, 6*l.* 13*s.* 8*d.*; Oban, 4*l.* 3*s.* 5*d.* Oban would appear to be the paradise of telephones—4*l.* 3*s.* 5*d.*; therefore, when people talk about extortionate charges of 20*l.*, &c., these facts will dispel and correct some of those illusions. The Manchester, Liverpool, and Blackburn charge of 8*l.* 15*s.* 8*d.*, at all events, does not seem to be a charge of such an extravagant character as to be quite worthy of all the condemnation one hears fired at us.

Sir *Charles Cameron*—continued.

Mr. *Benn*.

4898. It is rather cold comfort, is it not, to the London subscriber, who, on your showing, is paying 14*l.* 14*s.*, to know that the rest of the country works out at 9*l.* 2*s.* 2*d.*?—Yes; "cold comfort" or no, rents are much higher in London than in the country, and you have to submit to it, if you are in London; and all labour is so much dearer there. There are reasons for it. You cannot have the same things at the same price if the circumstances and the constituents which make them are different.

4899. Is it not a fact that where competition has reached a successful point, in every such town your rates have been reduced?—Competition! Well, there has been scarce any competition.

4900. I refer to Dundee and Manchester, and places like that?—Yes.

4901. The rates have been reduced in those cases?—Yes, for the time being.

4902. Of course; for the happy "time being"?—If I may venture to suggest this, as a very old hand, you must not lose sight of the fact that no doubt competition (cutting of rates) always ends in one way, that is, in putting them up again; and the waste of competition has got to be covered; so that the probability is that in the end they are put up to a much higher rate than the initial figure.

4903. I want to ask you a few questions on that prospectus again, which you repudiated, but which, so far as I can discover, other gentlemen whose names appear here have not repudiated; the prospectus of the New Telephone Company, dated July 1892; according to that prospectus, I think it shows that for 20,000 subscribers 750,000*l.* was enough to provide for that business?—Will you kindly just draw my attention to the paragraph? It is a long time since I saw it.

4904. This is the paragraph which sets out the amount of money required, beginning with "The capital outlay"?—"It is intended, therefore, to supply plant on the double wire (metallic circuit) system."

4905. "It is estimated that 750,000*l.* should suffice"?—Yes.

4906. That would be, roughly, for 20,000 subscribers?—It says here, "10,000 metropolitan subscribers, with Central Exchange switch-boards and other apparatus, capable of working 25,000 London connections."

4907. "And upwards of the same number in the provinces," you see?—"The system to be adopted by the company will comprise all substantial improvements in telephony." Yes, "25,000 London connections." Central Exchange switch-boards and connections to 25,000 subscribers.

4908. Let me take you to the commencement of the sentence: "The capital outlay for supplying the first 10,000 subscribers in London, and upwards of the same number in the provinces";

Mr. *Benn*—continued.

vinces"; that may be taken to mean something like 20,000?—Yes. What does it say? It says: "and upwards of the same number in the provinces, including 1,400 private lines and about 400 call-offices for public use."

4909. I quite understand. Now, on that basis, 750,000*l.* for 20,000 subscribers, the country over, may I assume that 50,000 could be provided for on the same basis for 1,875,000*l.*, that is doubling the 75,000*l.* and adding the proportion for the 10,000?—Yes; but what proportion?

4910. Well, it is doubling exchanges, doubling everything?—You see there is only here provision for a portion of the necessary outlay for the 10,000 subscribers.

4911. But there is a full complement of apparatus here for your 20,000 subscribers. This estimate is to cover the whole of the expense to provide for 20,000 subscribers?—Yes.

4912. Very well; then I ask you, if that be true with regard to 20,000 subscribers, whether it is not fair to estimate that 50,000 subscribers (about the number at present subscribing in Great Britain) could not be provided for on this basis for under two millions of money?—No; it is ridiculous.

4913. Taking this as a basis?—You lose sight of the fact, that if there were 50,000 subscribers in one place, or in one limited area, the relative cost would greatly exceed that figure.

4914. It is not "one limited area," I am asking you to take the whole of the kingdom, as set out in this prospectus. Imagine that, instead of the number being 20,000, it is 50,000, distributed over the whole of the area; I ask you, with double the figures in proportion to what it is on this basis, is it not fair to assume that Great Britain could be telephoned for under 2,000,000*l.*?—It is absurd.

4915. This may be absurd; but on this basis, is it not so?—It is quite absurd; we cannot ignore facts.

4916. I want to ask you to look at some other figures as affording, I think, a remarkable corroboration of the truth of that estimate. With regard to the National Telephone Company, I think your expenditure up to December 1894, roughly speaking, is something like 4,400,000*l.*?—Yes, about.

4917. About that?—Yes.

4918. Now, if we deduct from that 4,400,000*l.* what you have spent to purchase competitive undertakings, can you tell the Committee what it would leave?—What do you mean by what we have spent "to purchase competitive undertakings"?

4919. To purchase new undertakings, buying up the various companies you have described to us?—I have already told you what it has cost. Up to the final issue of that table that I read, it has cost 3,272,000 sovereigns.

4920. I have it separated in this way: I have your total expenditure; I have your purchases from the year 1890 on to 1894, and I make it (I may be wrong): Purchase of new undertakings, 2,250,000*l.* odd; I deduct the 2,250,000*l.* odd from your 4,430,000*l.*, and that leaves a balance presumably for actual cost of efficient works of 2,179,000*l.*?—Yes.

Mr. *Benn*—continued.

4921. Is not that rather a remarkable confirmation of the estimate of the new Telephone Company?—Now, let us get back to your proposition and our experience. You suggest that 50,000 subscribers could be started for double 750,000*l.*, do not you?

4922. Well for double, plus the 10,000*l.*, for under 2,000,000*l.*?—Yes. Very well. Now, we have spent since the amalgamation in the years 1891, 1892, 1893, 1894, in hard cash, 1,459,000*l.* over and above all expenditure up to that date.

4923. You have not repudiated my figures?—You can easily get out the mean. How many people do you want to accommodate; 50,000?

4924. I take your figures in this prospectus, which you have repudiated, but which three eminent engineers still say is a valid estimate?—I have not repudiated it.

4925. I take the actual expenditure here of your company on works, separating the purchase of these competitive companies. I find that the figures almost tally, and I ask you: Is not it a fair assumption that the figures put forth under your own name in 1892 are after all correct?—Well, no; I do not think they are correct. I think it was an estimate which we only hoped might be realised. As I said the other day, we were most anxious that it should be so, but it was because we found upon examination that it was not likely to be so that we resorted to another plan.

4926. Is it not rather interesting to find that the figures of your own National Telephone Company come out almost identical?—Where do you get those figures from?

4927. Burdett?—Well, what does he make them; I have not seen the figures.

4928. I do not think you will have any difficulty in checking them (*handing a document to the Witness*)?—The 4,463,000*l.*, do you mean?

4929. Yes?—And that now corresponds to 75,000 subscribers.

4930. 75,000, is it? No, not so many; about 50,000 now, is it not?—Oh, no, 75,000. Then if 75,000 cost 4,463,000*l.*, what will 50,000 cost? Is not that the answer to your question?

4931. Yes, after deducting this "watered" capital, about which we have been talking?—If you like to call it "watered," yes.

4932. It is in a separate column; but you have told us the assets in that column are very unsatisfactory?—Which column?

4933. The assets of the purchased undertakings?—As regards the bulk of them they are of a satisfactory kind, because they are what represented the market value at the moment.

4934. The market value of the shares?—The market value of everything.

Sir *James Fergusson.*

4935. I do not think you have yet been asked to what extent you have carried out your undertaking to the New Company, and through the New to the Mutual Company, in the way of improvements?—We have spent a very large sum of money upon the improvements. As I stated to the Committee, the metallic circuiting of London is nearly complete, it will be complete by the end of the year; Manchester is under-

Sir *James Fergusson*—continued.

going a transformation; Glasgow has had the appurtenances of a metallic circuit provided, that is to say, the switchboards; we have spent a great deal of money upon the switchboards.

4936. Without going into too precise detail, might I ask you, could you say anything like the percentage of your lines which you have converted?—We have converted 117 exchanges, fitted, or in process of fitting, with complete metallic circuit wires and switchboards. London is included in those. That represents 18,978 subscribers' lines. Nearly the whole of that work is done. All the boards are in, and it is a question now of completing one station in London (the Pelican station), and at the end of the year we shall have that complete.

4937. What will that leave uncompleted?—That will leave the number of exchanges for the metallic circuit switchboards 78, representing a total of 20,995 earth-circuit lines.

4938. Then you will have nearly completed one-half?—Yes, the important outlay there is on the switchboards, and they are in, and new wiring has to be done to transform that into a metallic circuit system. That will bring on 20,900 more circuit lines. That is 38,000, or in round numbers 40,000. That is very easy and very equal, and that would include Glasgow.

4939. Am I correct in saying that your statement means that you have nearly completed one-half of your lines on the improved system?—Two-thirds.

4940. Could you say within what time you expect to complete all that you have thus undertaken to convert?—As regards London we see our way, because we are up above the ground. As regards Manchester we see our way; but with respect to Glasgow and some of the other important places, they must depend entirely upon the facilities given to us for wayleaves.

4941. Presuming that you had the assistance of the local authorities, within what probable time could you complete it?—In the case of Glasgow I should think a year.

4942. Do you think that within a year, receiving the necessary facilities, you would have converted the line so as to fulfil the engagement which has been referred to?—Yes, I think so.

4943. Now you, of course, desire to attract all the business possible. Your object, I have no doubt, is to attract subscribers, and develop your business as largely as possible?—Of course we have the strongest inducement to do that, because our short tenure involves this, that unless our business largely increases there will be no possibility of redeeming beyond a very small percentage of our nominal capital. Of course that is one of our difficulties. I do not know what is going to arise, as I have said, or what value to put upon our machine as we leave it. It will have some value, but nobody can tell what. It would not be all loss, because private wires are becoming an important element in this question, and on the effluxion of time as regards exchanges, we shall still be in the possession of the private wires; and I daresay the interest of our company (and I feel pretty sure the convenience of individuals) will very largely increase the business of private wires.

4944. If you will excuse my interrupting you for a moment, I was leading up to another point. You say (and it is natural to suppose) that as a commercial business you desire to develop it as much as possible, and so to meet the wants of the public?—Of course. I am afraid even "the wants of the public" is only second to our own sense of salvation; we have got to save ourselves.

4945. I mean that would be the necessary effect of your profitably developing your business?—Nobody can be placed in such a position as we are, no new company, not the Post Office themselves, can be placed in such a position as we are in, to so improve the business as to attract customers and make profit.

4946. Now I wish to ask you this: How long would that be your interest. Your existence, humanly speaking, will cease in 1911. How long would it pay you to go on developing your business and meeting the requirements of the public?—Well, as long as any man of a tolerably sound actuarial mind could make up his mind to spend money on a continually decreasing tenure; and it will not be long before we have to face that; between now and nine years hence that will arise, and how long we go on spending money can only be determined by the increase of our business from year to year, and the amounts we are able to set aside for redemption.

4947. Then a day will come, and possibly in nine years, when it would not be remunerative to you to extend your capital expenditure?—Not remunerative to anybody on the tenure on which we hold.

4948. Then by that time the Government would have to make up its mind how the wants of the public were to be met. They would not after that be met by the ordinary operation of your company?—Of course, they would have to meet that. We should possibly be driven by the force of circumstances to say: No; now we cannot afford to spend any more money; what is to be done? You must do it, we cannot; no new company can. Nobody could raise a shilling upon the present tenure to start a new concern.

4949. In fact, after that time, either the need of telephones must be supplied by another agency or you would have to work on separate conditions, on account of the Government or otherwise?—I think so; I think that is inevitable. Anybody who considers the position for a moment must see that, and that is rather intimately (I may just incidentally remark) mixed up with the question of prices. Of course, if we had 25 years to run instead of 16, or 42 years instead of 25, the question of price would at once assume a totally different position.

4950. You told the Committee that hitherto (meaning before the agreement) your development had been extremely hindered?—Yes, under the first licence, extremely so; under the second licence less so; because there we were enabled to get our exchanges on the trunk wires; and that was immediately a large additional inducement to the public to join us.

4951. But now there is no hindrance other than the want of facilities?—The want of facilities, yes.

4952. Given proper facilities, there is no hindrance to your developing your system as much as

Sir *James Fergusson*—continued.

as possible, and it is your interest to do so?—If we had had even as much facility as they have in Liverpool under the law here in London and the great cities we could have developed telephoning much more economically, much more rapidly, and at a price which would have enabled us to supply our customers at a less annual charge.

4953. Would your expenses decrease with increased subscriptions?—In some respects they would; in others they would not. When you reach a particular level of subscribers in an area, up to a particular point, the more subscribers the better, because they dilute your biggest charges, but when you get beyond a certain number complications are so increased that the cost per subscriber becomes larger.

4954. Then you have to sub-divide your area, and then with a moderate number on each switchboard it becomes again economical, does it not?—Yes, but there comes a question of the choice of evils. You must elect one of two things.

4955. I want to get at this, whether it is quite clear that it is your interest to develop the business, because it would appear that after a certain time it would be rather your interest to discourage subscriptions, and if that were so that would tell the other way?—That would tell the other way. Happily that position has not yet arisen. Our interest now and for some years to come will be to develop the business as rapidly as possible.

4956. A contrast was drawn between the use of the telegraph and the telephone; you were asked about it, and I am not sure that you did not say that the use of the telegraph was relatively much greater in this country than that of the telephone, consequently that the telephone was not so much taken advantage of. I think you said that?—I produced the figures of the great postmaster, Von Stephean, who gives it. He says that in Great Britain there are 177 telegraphs to every hundred of the population, whereas, in Germany it is only 55, and in Sweden and the model places it is only 30.

4957. But the telegraph lends itself more to some business transactions than the telephone; where, for instance, a man has to dispatch a great number of messages he cannot wait to dispatch them by word of mouth; is not that so?—Yes; I have no doubt the telegraph will have its uses; but where the telegraph service is cheap and prompt (as it is in this country to a degree which no other country enjoys, according to Mr. Stephean's tables) it is a very severe competitor with the telephone. I think the condition will be somewhat altered on the completion of your great trunk system. I look forward to the possibility of the competition by telephone being much more severe in its influence on the telegraph revenue in respect to long distances than in and about London. For instance, I see that in London (the metropolis alone) you have pretty nearly half your entire number of telephones, according to the Post Office returns. Well, I do not look for any very great impression on the telegraph revenue in London, within a mile or a half-mile or two miles, but when you get out of London, when you get long distances, the telephone is so much superior as an implement and the price is so encouraging that I think your telegraph revenue will be seriously affected.

Sir *James Fergusson*—continued.

Mr. *Tully*.

4958. I think in the last answer you gave you stated that the telephone was a much superior instrument to the telegraph, and that it would compete with ruinous effects against the telegraph?—I think with serious effect.

4959. I see that on your examination in 1892, when you were a witness here, you lamented that the telephone system had been the means of reducing the revenue of the Telegraph Department from 80,000*l.* or 90,000*l.* a year to 68,000*l.*?—It has had the effect of reducing the telegraph revenue; in fact, the whole of this modern development, the separation of the trunk lines from the local services, is based on the necessity of protecting the public revenue. As in other Acts of Parliament, the *raison d'être* of the new measure is to protect the public revenue.

4960. The public revenue has been protected very largely during the present year to the extent, according to the Post Office, of 300,000*l.*?—I think, according to the last report, it showed a somewhat considerable reduction.

4961. If the rerson of that instrument was to protect the public revenue, it has failed in that respect, because the public revenue has been seriously affected since?—This has not yet come into force.

4962. I believe your company commenced its operations by getting hold of all the telephone patents?—Yes.

4963. You could not tell us how much it cost your company to capture all the telephone patents, could you?—Yes; about 300,000*l.*

4964. And as the result of your having all the patents in your possession, the Post Office was unable to compete successfully with your company in the telephone?—The user by th Post Office, or anybody else, was somewhat restricted, but they had, under arrangements, a considerable number of telephones, and did, in fact, use telephones independently of the company. No doubt, during the term of the patent, or rather, for 11 years out of the 14, the possession of the patent gave our company an advantageous position, as compared with competitors.

4965. I think, with regard to Plymouth, you said (that was a very small matter) that what happened in Plymouth was that the company gave subscribers of the Post Office telephones for nothing?—Yes; that is one of the usual efforts of competitors. It was done on a much larger scale in London by the new Telephone Company. Those subscribers which you heard of were tempted in that way.

Sir *Charles Cameron*.

4966. They were done; "it" was not done?—Well, the doer was "done," perhaps; they were to have the telephones put into their houses and free use up to the time when the subscription of the National ended.

Mr. *Tully*.

4967. Then you do not agree with the opinion of the Post Office expert who gave the Plymouth case (this very small one) as a reason why the use of the Post Office telephones was a failure all over the country?—That particular case I do not remember; of course I was not mixed up with the Plymouth case, but I do not remember any other case of the kind as having been alleged against our company by the Post Office or anybody else.

4968. When I asked why the Post Office was unable to compete with the company, and he gave the Plymouth case as the reason, would you say the Plymouth case was a very small one?—That was a very small case.

4969. That showed he was arguing from a very small fact to a very general conclusion?—I know of no other case where that particular class of tactics has been resorted to except in the case of the New Telephone Company in London, who seduced, I will not say "seduced," but induced, those thousand or more people who signed the document which has become historical to compete. Some people do compete in that form; we do not.

4970. I was reading this very interesting evidence you gave in 1892. I think you said that you were connected with the old telegraph companies; it was you who carried out the bargain or agreement between the old telegraph companies, was it not?—No.

4971. This is not the telephone, but the telegraph?—Well, I had a good deal to do with the telegraph business.

4972. You negotiated that bargain?—Well, I negotiated for myself; one of the first telegraph bargains was made by me for the Chatham and Dover Railway a long time ago.

4973. That paper you produced showing the actual cost of construction of each of these companies, and the amount of their share capital; the companies which you swallowed up; you have no objection, have you, to hand that paper round?—Not the least.

4974. You stated to us that 1,292,000*l.* of your capital is "watered" capital?—No, I did not state that; some honourable Members have suggested it.

4975. You say, "what some people call 'watered' value, 1,292,000*l.*"?—Yes, what is described as "water;" but there is a good deal of spirit in it.

4976. Well, to pay a dividend of 5 per cent., I suppose, on that portion of your capital costs about 64,000*l.* a year?—Five per cent. upon a million and a quarter is approaching those figures, yes.

4977. And each telephone subscriber, in order to enable you to pay this 64,000*l.* a year, has to pay an increased price necessarily for his telephone?—Well, that is a proposition; I do not know that he has.

4978. Where do you get the money to pay that 64,000*l.*, if you do not get it from the telephone users?—One gets it in the subscription.

4979 That follows what I say; it has to be charged to each subscriber?—Yes, it has.

4980. A certain proportion of it?—Yes, and anybody who attempts to found another telephone company will find themselves in exactly the same position.

Mr. *Tully*—continued.

4981. Would a corporation, like that of Glasgow, be in that position?—Yes, I think so.

4982. They have what is called a "common good fund"?—I do not know whether they can apply their fund to this purpose; but they would have to charge a paying rate. Of course, they could raise money at a little less rate of interest.

4983. Surely they would not have to pay a percentage on one and a quarter millions of what is called "watered capital"?—On what is called "watered capital;" I do not know what corporations do; I do not know that they are more far-seeing, or more able, or that they do their work cheaper than we do.

4984. The Glasgow Corporation has 100,000*l.* in this public fund?—I do not know the application of that fund.

4985. Could they not start without having to meet any such charge?—Of course, if they can start a telephone system without paying for it, it is a very convenient thing to do.

4986. And it would be a great advantage to the people in this place to take it at such reduced rate?—It would be an extreme advantage to the people who could afford to pay a rate per annum for a service so valuable that the rate is as nothing in the consideration; but it would be a great hardship upon the inhabitants of Glasgow, for whom that fund is intended, who could not possibly (and never would) use the telephone. If the theory is that these cheap rates are to be brought about by corporations by pledging the rates, or by appropriating moneys, it means this, that the merchants, the manufacturers, the people who, in fact, use the telephone, and who can well afford to pay a great deal more than they do pay for that user are to be relieved of payment at the expense of the general good.

4987. The taxpayers are paying already for the business that you have captured from the Post Office?—Are they?

4988. Yes; in the loss to the Telegraph Service?—That is not my fault.

4989. I do not say it is your fault, but that argument about the tax and you posing as the guardian of the taxpayers does not come very well from you?—I think, if the proposition is that the rates of any city are to support the risks of a telephone service in order that tradesmen (going up), merchants, financiers, people who could well afford to pay, are to be relieved of payment, I think if that went on the taxpayers would have something to say of it.

4990. The taxpayers of the three kingdoms are paying at present?—The taxpayers of the three kingdoms are gaining something; we paid 70,000*l.* odd this year.

4991. There is the loss of the royalty?—That is not our fault; there is the working expenses.

4992. I am not talking of your fault; it is the point of view of the taxpayers I am talking of?—Who is responsible? The telegraph revenue increases, so does the telegraph expenditure, and it will increase; and the deficit arises from the cost progressing much more rapidly than the income; and that will go on.

Mr. *Tully*—continued.

4993. One of the Glasgow witnesses told us that your company were pushing their claims so far that you objected to their having electric tramcars?—That seems natural if the electric tramcars were pushed in a fashion to make electric telegraphing or telephoning impossible. We established that. It is like marrying a wife; you have got to live together. We had to live with the tram companies, and that was recognised. We had a great fight over that. The tram companies wanted to paralyse the telegraph and the telephone by running currents which would be fatal to both, particularly the telephone. That was not a very rational thing. If the tram companies of Glasgow had had their way there could not have been any telephoning in Glasgow.

4994. Your company here in London, making this dividend on this large amount of capital, which is called "watered" capital, object to the people of Glasgow having electric tramcars?—Not at all. We are delighted that they should have them, even if they lose money upon them, but not at the expense of stopping the telephone or the telegraph; that is what they wanted.

4995. And the gentlemen from Edinburgh who told us that your company objected to their pulling down some old houses which they thought unsightly in their beautiful city; that gentleman was also unreasonable?—I should have been with him about pulling down anything in Edinburgh that is old; but I do not remember that.

4996. Sir James Russell told us that your company had wires attached to some old houses; that they wanted to remove them, and that you would not permit them to do so, and that you put them to a great deal of cost about it?—I really do not know the circumstances, but, I suppose, if we had a right to the occupation of some old houses, and somebody wanted to pull them down, we had a right to maintain our right; that seems reasonable.

4997. You think it is a fair use of the powers, under this licence from the Postmaster General, to put the people of Edinburgh to such costs?—We have no "powers" under the licence of the Postmaster General; that is what I complain of. We had no rights whatever under any compulsory powers. Any rights we had were the result of agreement and negotiation, and, I suppose, if we were in occupation of premises by agreement, we were entitled to the beneficial occupation; we paid for it. Of course, if you get up a movement of this kind, and provoke and invite such complaints against a company, you can get plenty of them, especially from imaginative places like Edinburgh and Glasgow.

4998. You want power under this agreement to compel these corporations and these people to give you wayleaves?—We only want them, I suppose, because the public want telephones. We do not want unlimited powers; we want defined powers; and it is quite idle to suppose that this thing is to go on and grow, and grow, and grow, unless somebody has power to do those things which are essential to make it grow. I have had to say that almost *ad nauseam*.

4999. I want to show that a private company is not so likely to do those things in harmony as a public body?—Then you have no experience.

Mr. *Tully*—continued.

I only wish I were the Post Office; I only wish I could send sappers and miners about to put up my poles. The Government have got an enormous advantage over us.

5000. But with their enormous advantage they were not able to compete with you?—We are very much more obliged to be upon our good behaviour than the Government are. Everything we do is done on mere suffrance, and has to be done with as great skill and with more forbearance. We have the public hammering away at us on one side, saying we do not give a proper telephone service. Glasgow comes, and is frantic on the subject. On the other side we have people with wayleaves, people with powers, with caprice, well, something even worse; they are getting now to insist upon enormously increasing the payments for these things, because we have no powers. It is a wonder what has been done by this company in England to put up this machinery on suffrance.

5001. What remedy can you see under this agreement; if your company supply an efficient and a dear service, what remedy have the public?—Well, I suppose, to complain to the Post Office.

5002. What is the use of complaining to the Post Office; the Post Office cannot supply, themselves, a cheap and efficient service?—The Post Office have power to listen to such complaints. As licencees of the Post Office (I have often announced the feeling of our company about that) we consider that our duty is to satisfy the Post Office that our service is reasonable under the circumstances of a particular place.

5003. Supposing the public (that you tell us do not know the difference between 20 seconds and 20 minutes) do not think your service efficient and cheap, what remedy have they?—Well, they have the remedy of applying to the Post Office and making their complaints.

5004. In what way can the Post Office enforce a better state of things?—If the complaints are reasonable they can intervene; we are the agents of the Post Office; we are a part of their machinery.

5005. What is the penalty?—I am going to tell you the penalty. The Post Office have reserved the fullest right to themselves, in cases where the service does not exist at all, or where it exists in an inefficient form, to remedy the evil by themselves competing with us.

5006. But is not the whole effect of the evidence given on behalf of your company that competition is, and would be, a nuisance?—So it would be; so it is.

5007. So that to get rid of the bad service, the Post Office are bound to establish what you describe as not being something for the benefit of the people?—Well, you see, there are imaginary evils and real ones. You cannot carry on a business of this sort without complaint; I even think sometimes I see complaints about the Post Office. It is inherent in a thing. What is the average of it? People are very ready to make complaints; they are not always reasonable.

5008. But people sometimes know the differ-

Mr. *Tully*—continued.

ence between 20 minutes and 20 seconds?—Poor Telephone Company!

5009. You say that the competition of the Post Office would be the only remedy against an inefficient and a dear service?—I think it is a very good remedy. Of course they could license to anybody they pleased.

5010. So competition in that case would be a benefit?—Competition, I suppose, would have the effect of pulling us up to the mark.

5011. How are the Post Office to arrive at a conclusion that the service is bad and dear?—By taking evidence instead of rumour, and forming a judgment.

5012. Suppose a corporation are willing to risk their own rates instead of asking the Post Office to risk the public taxes in competition, would it not be far better for the rest of the country?—No; I should think about the very worst thing that could happen would be for the telephone service of the country to be cut up into little areas worked by corporations.

5013. Under the new agreement are not the companies confined to local areas?—Yes; and those local areas cover all places where there are corporations. This business is too delicate, it is too important, to be broken up; it is a monopoly in its very nature; it is pronounced to be a monopoly by the law; it belongs to the Post Office now. We are mere agents, and I suppose the Post Office have given evidence, or will give evidence, as to the importance of conducting it as one uniform system.

5014. That is exactly my grievance; the Post Office seem to have given up to your private company a monopoly. I do not ask you about the telegraph service for which they paid so much through the nose a good many years ago?—I have had so much to do with the Post Office in different capacities that I bow to their capacity to take care of themselves and the public.

5015. It was for the benefit of your shareholders that you entered into the agreement?—Of course I am bound to do the best I can for them.

5016. I congratulate you upon it?—But I cannot do the best I can for them if the service is so bad that the people will not use it. I should like to see, experimentally, what a big corporation would do in competition with our company on even terms.

5017. Of course you would give telephones for nothing there as in Plymouth?—I do not know that we should. No, we would not, and I would undertake to keep the business at a bigger rate than the competitor.

5018. Of course that is a matter of prophecy, and we can all be our own prophets; what date is this agreement?—Which agreement?

5019. The new agreement?—August 1892, I think it is dated. This would run on until 1911.

5020. Was that when the new Government came into office?—The heads of agreement were settled before the old Government went out; they have been matured by the new Government during the last two years.

5021. Was it dated on the exact day when the last Conservative Government went out of office?—Well, it was very near the time when the Government went out.

5022. It would not be two hours before, would it?—That has nothing to do with it; it is a matter which had involved weeks, almost months, of the most serious discussion; innumerable points had been discussed, and difficulties overcome; and the heads of agreement were in shape.

Sir *James Fergusson.*

5023. May I interpose this: and the purport of the agreement had been stated in Parliament, had it not?—Over and over again.

5024. That had been stated in the House of Commons?—It has.

Mr. *Tully.*

5025. You have stated that this license would be made the more valuable to your company if it was extended for a longer period?—It would be more valuable to the public, because it would enable us at once to reduce the rate. If you do a little sum in redemption, you will find how it runs up, whatever we get, 1,000,000, 2,000,000, 3,000,000.

5026. If you were to be bought up instead of having this increased length of time, the Post Office would have to pay a largely bigger price?—It is a choice of evils.

5027. And the Post Office would have to pay for this, one million and a quarter of capital, which is called "watered"?—The Post Office will have to pay upon the award of an arbitration if we not agree; and if we do agree, they will have to agree upon some intelligible principle, not having so much relation to the nominal capital as to the value of the going business, "market value," now, for instance.

5028. If the Post Office entered into competition with your company in any districts, because of your giving (we will imagine) an inefficient and dear service, would the Post Office have to buy up the portion of your materials in that district?—Well, I do not know; as a matter of business, I should think the Post Office would pay very dearly if, in order to cripple our business, they spent their own money.

5029. But you state that that is the only remedy the public have under this agreement; that is competition by the Post Office?—The remedy they have will not involve that consequence; there is no such deep-seated complaint in any place against this company as would justify the Post Office doing more than they can do.

5030. That is a matter of opinion. You may have one opinion, and we on the other side may have another?—I have an extremely strong opinion. One has to do with these things as matters of business, and not as matters of what proposition.

5031. There is just one other question with regard to these pipes that were laid surreptitiously; could you tell us anything more about them; that is, in London?—Well, I can tell you they were laid surreptitiously in the sense that the engineer of the Commissioners of Sewers and the authorities of the Commissioners of Sewers did

Mr. *Tully*—continued.

did not know that they were laid until I told them.

5032. Those particulars you gave us with regard to a sum of 5,500*l.*, mentioned as the price for the option of using those pipes which were laid surreptitiously?—The Duke of Marlborough was chairman of the New Company; he was also a director of the London Electric Company, and he and they made what I suppose they thought was a very good agreement in the interests of telephony by stipulating that when they were opening their trenches and putting in their electric pipes these auxiliary pipes should be put in at the same time, and there is an agreement in existence governing that.

5033. That 5,500*l.*, I suppose, is part of your capital at present?—Well, no, it is not part of our capital; it is part of the New Telephone Company's capital, but taken over from the Pioneer. All that Pioneer business, as I told you, took place long before we had anything to do with them, and that 5,500*l.* was for the option; and there is 1,000*l.* there in deposit, and there is a bargain which, if it were carried out, would be ruinous to the telephone subscribers of London and to the Telephone Company.

5034. There is just one other question; I do not know whether it has been asked before: the Post Office are in competition with your company in Newcastle, are they not?—Yes.

5035. Is there a connection between the exchanges of the Post Office and the exchanges of your company?—I do not think so.

5036. Your company object to the connection?—I do not know that we have ever been asked for a connection. First of all, is it the fact? I will ask. I am told we have no connection.

5037. You object to make the connection?—Well, we have not been asked, that I know of; when we are, we shall consider what we will do.

5038. Although you are there under the licence of the Postmaster General, you will only make it a matter of consideration whether you will make connection between your system and the Post Office system for the convenience of the public?—I think we should possibly do, if anything were suggested by the Postmaster General, very much what he asked us to do in that particular for a consideration.

5039. For a consideration?—We should do what we have done at Manchester with the other company, we should afford his subscribers the opportunity of going on to our system for something for us. Is that rational?

5040. So that this agreement, in case the Postmaster General competed with you in any district, would not compel you to connect your exchanges with the Postmaster General's exchanges?—No, there is no power to compel us; but we are people who are extremely open to reason and to consideration.

5041. You are open to persuasions such as the persuasion of a quarter of a million of money. You have told us about the "persuasion" of the New Company to amalgamate with yours?—You do not find generally that people give valuable consideration for nothing. We cannot afford to do it in the interest of the telephone.

Mr. *Tully*—continued.

Mr. *Snape.*

5042. I wish to ask you two or three questions on the statements, one and three, which you put in. In statement "three" you describe the working expenses to average about 6*l.* 4*s.* 7*d.*; what do those working expenses include?—They include everything.

5043. Everything?—Yes.

5044. Interest on capital?—Oh, no; working expenses.

5045. Is there any exception; anything that you have to add to that at all?—They are the whole cost of working and maintaining the thing from day to day as a going concern, including the up-keep of the material. That is the working expenses.

5046. The whole of the administration?—The whole of the administration, but no charge for interest on debentures or any portion of the interest on capital.

5047. Your charge per subscriber being 50 per cent. more, or thereabouts, amounts to 9*l.* 2*s.* 2*d.*?—Did we show a balance quite as much as that?

5048. That was your statement?—I do not think that was so; 62 per cent. I think we made it; 62 per cent. of the working expenses or of the receipts.

5049. The balance is devoted to paying interest on capital, is that so?—The balance is devoted to two things, paying interest on capital and reserving for redemption.

5050. Then, practically you are realising a profit of 50 per cent. on the working expenses?—Oh dear, no; 62 per cent. for working leaves 38 profit; that is how the figures work out.

5051. Well, 38?—Thirty-eight and 51 are very different. Allow me, sir, just to look at the figures.

5052. Amongst those working expenses you classify under the head "A" certain amounts for royalty, way-leaves, rates, and taxes. Can you tell us how much of that sum which you state here in that statement three is for way-leaves?—A very large sum.

5053. What percentage of the 20 per cent. is for way-leaves?—It is a very large sum.

5054. And neither the way-leaves nor the rates and taxes would have to be paid if the telephonic supply was in the hands of a municipality. They would have a right of control over their own streets, and would not have to pay way-leaves, and of course they would not have to pay rates to themselves?—I do not know that they would not have to pay way-leaves. Have they any power to attach to people's houses or to go over them? They can use the streets; the streets they have power over.

5055. If the telephonic supply was in the hands of the municipality, a large portion of this 147,938*l.* would not have to be paid. That portion you have to pay for way-leaves and for rates and taxes the municipality would not have to pay?—That entirely depends on the methods of construction. The municipality of London, if it

Mr. *Snape*—continued.

carried on an overhead system, would have to be subject to pay wayleaves as we are, and London is the worst case of all; 1*l.* 14*s.* per subscriber per annum.

5056. Still, they could arrange to carry the lines on their own thoroughfares without having to pay wayleaves?—No doubt in that sense they might have some advantage; yes.

5057. Now, following on; suppose, instead of the municipality having to give the telephone supply, the State did this; the State would have not a penny of this 147,938*l.* to pay. It would neither have to pay royalty wayleaves nor rates and taxes?—They would have to pay it in a sense, because they would have to give it up; they are getting it now; 75,000*l.* they are getting this year; it will be clear money. If they do not charge it, they do not get it; therefore the State do not get it. I want particularly to impress this upon the Committee, because this does affect the public interest very largely. They would be giving a service beyond all comparison more valuable than the price that is paid for it for less money, and therefore they would be giving people an article much below its value in order to reduce the public revenue.

Mr. *John Ellis.*

5058. To a very limited class of people, I suppose you would say?—The bulk of telephone users. You cannot put it higher or lower than this: that every man in England at this moment, for 6*d.* a day, can use the telephone; that covers shopkeepers, merchants, and every class. Can it be said that the people who use the telephone are over-charged at 6*d.* a day?—Why, it has not the slightest reference to the value of the service done. Now, are you going to reduce that? What for? To diminish the public revenue? Not at all to benefit what you call the "masses"; they do not want the telephone; they do not use the telegraph to any extent. Then who are you going to benefit? The people to whom this thing as a commercial instrument and a social instrument is of ten times more value than the present subscription; that is not in the interests of society.

Mr. *Tully.*

5059. Anything that helps the commercial interest would not help the masses?—It would help them indirectly, enormously.

Mr. *Snape.*

5060. I will not enter into that; I do not agree with the views you express?—I am sorry for that.

5061. I will pass on to the first statement you handed in. I shall be glad if you can tell us what has been the effect of the reduction in the provinces from 15*l.* and 12*l.* to 10*l.* I mean the effect in the increase of the number of subscribers?—Well, that I cannot tell you; the immediate effect was a loss of 55,000*l.* a year in the revenue of the then subscribers.

5062. Yes, that I see too. I think it is of the very greatest importance, if you make the one statement, you should give us the other information. It may be well worth the loss of revenue (it might have been in the hands of the State) to have given the greater facilities to a very much larger number of subscribers?—I think I put in a table showing the progression of new subscribers from year to year since that date; and you have got, if you can, to find out the relative operation of two things: What number of those subscribers came on as a consequence of the increased knowledge of the value of the telephone; and what number came on from the reduction of price. I will undertake to say myself, as a matter of judgment, that the bulk of them came on from the increased knowledge of the value of the telephone, and not from a reduction of price.

5063. I wish you could have given us the information in a more precise form, because it is of importance, I think, that we should know how far a reduced charge leads to an increased use. However, you have stated to-day (I think in answer to Sir James Fergusson), that there is a point beyond which an increase of subscribers brings no profit; I am not quite sure whether you intended us to understand it would really produce loss?—Yes. Suppose you have got, for instance, a small exchange for 200 subscribers. That enables you to treat the matter with a particular class of board with a particular establishment and the wires. Very well: your 200 get to 250. Over 200, looking forward to the growth (natural prevision), you go into a very much more expensive board to begin with; you probably put in a board for 500, and the board itself will cost (take 500 as compared with 200), certainly twice as much, somewhat more. Very well; now you have to incur that expense when you get beyond the 200. Then you have to wait until the capacity of the board is exhausted, in order that your outlay may be covered. If it is not covered the first or the second or the third year, per subscriber, the price (the working expenses) has been greatly put up, and that goes through from 200 to 500, from 500 to 1,000, and so on. The illusion in which some of our friends live is that they have only to spend the modest trifle of 400,000*l.* a year to find themselves at once in possession of the full user of machinery up to that capacity; that is not what arises. You have to provide a large outlay, and it takes a very long time before that large outlay is used to its full capacity; therefore all the years it is being used below its capacity the cost to the subscriber is so much more. The same with the working expenses.

5064. Then I understand the point to which you referred in reply to Sir James Fergusson meant that until you attained the number of subscribers for whom you had provided increased accommodation it would not pay, but that when it attained that point it would pay?—You have got to do the two things. You have got to consider the present and the future. It will pay when the time comes that you enjoy the full beneficial occupation of the machine, but not in the interregnum.

5065. In connection with the multiple board, I think you make provision for increasing the 200 subscribers; I think that is the addition you make, is not that so?—Yes.

5066. Can you tell us what the cost of providing

Mr. *Snape*—continued.

viding for these 200 subscribers would be; how many operators does it require; extra operators?—I will show you what the mere cost of the board is. I have had that worked out. Mr. Gaine will give it me, I daresay.

5067. I asked for the information from another witness earlier in the inquiry; I was told it was to be supplied by you?—I am sorry I did not note that, but we shall be happy to produce it; it may be in the room. I had it worked out. For the sake of the argument, the cost per subscriber in respect of the board is 1*l.*, we will say; when you get to a bigger board, it is 3*l.*; when you get to a bigger board still, it is 7*l.*

5068. That is exactly what I wish to ascertain; I want to get at that?—At all events, if I cannot give it you now, sir, I shall be happy to do it afterwards.

5069. Whilst Mr. Gaine is finding it I will go on; there are only one or two questions apart from that; I may as well interpose them here; you are of opinion that a telephonic supply is a necessity for business premises?—Judging from my own experience, certainly.

5070. And a luxury for the wealthy?—Yes. It is less essential, I think, for purposes of luxury than of business.

5071. You do not think the small tradesmen and the less wealthy classes would be likely to make much use of it?—No, I do not think they will; at all events, if they will, they can.

5072. Yes, they can by paying a sum which is beyond their means?—Sixpence a day, or 3*d.* a message.

5073. That is beyond the means of many of them?—Small tradesmen?

5074. Was not that argument one that had force when the Post Office used to charge 10*d.* for carrying a letter; that correspondence was only the privilege of the well-to-do, or a necessity of the business people?—It is so remote a time since those rates were fixed by the Post Office that I do not know the arguments by which they were supported. There is no doubt the penny post did abolish the force of the argument.

5075. I think you know well enough that in those days it would have been said that the working class and working people would never send letters through the post?—Yes, but there must be some measure between the character of things; you can, of course, carry letters for a penny at a uniform rate all over Great Britain, because, concurrently with that invention, came the thing which made it possible, the railways; you have no machinery there as you have in the case of the telephone; you have no outlaying of capital at all in proportion to what you have to furnish a telephone communication.

5076. I am not so sure, but even if it does not apply in that respect the analogy does hold good; I think you will admit that the more you cheapen the supply of anything the more likely it is to be used, and extensively used?—Of course; that seems obvious.

5077. That is why I am asking these questions; I want to get at the increased cost; we have been told that it grows in geometrical ratio; I have asked questions about it, and been unable so far to ascertain what the geometrical ratio is; and I have visited the exchange at Liverpool to try to find out?—We will try to pose it for you, sir, in figures; shall I read this note of our engineer?

5078. Yes, if you have it?—"I likewise notice that a Member of the Committee asked Mr. Preece what the cost of an additional section to our Liverpool Exchange would be, both as regards capital and maintenance, and that he replied that probably this information would be given by the company." (That must have been your question, sir.) "Now, it is well-known that on multiple exchange boards the cost per line varies with the size of the exchange, and the facts in regard to this are as follows: Cost per line of a switch board for 200 subscribers, 1*l.* 7*s.* 9*d.*; 1,000 subscribers, 3*l.* 4*s.* 7*d.*; 2,000 subscribers, 3*l.* 17*s.* 8*d.*; 5,000 subscribers, 6*l.* 2*s.* 2*d.*; 10,000 subscribers, 9*l.* 16*s.* 11*d.* It will thus be seen that as the exchange grows larger the cost per line becomes very much greater, rising, as the figures just given show, from 1*l.* 7*s.* 9*d.* for 200 subscribers to 9*l.* 16*s.* 11*d.* for 10,000 subscribers, and this is more forcibly shown when we consider the case of increasing a 2,000 line exchange to 3,000 lines, and so on up to 10,000 lines. In this case the figures are as follows: Cost per line for new lines filled: 2,000 line exchange increased to 3,000, 5*l.* 7*s.* 2*d.*; 3,000 line exchange increased to 4,000, 7*l.* 1*s.* 7*d.*; 4,000 line exchange increased to 5,000, 8*l.* 10*s.* 10*d.*; 5,000 line exchange increased to 6,000, 9*l.* 17*s.* 4*d.*; 6,000 line exchange increased to 7,000, 10*l.* 15*s.* 7*d.*; 7,000 line exchange increased to 8,000, 12*l.* 19*s.* 2*d.*; 8,000 line exchange increased to 9,000, 14*l.* 4*s.* 11*d.*; 9,000 line exchange increased to 10,000, 16*l.* 6*s.* 4*d.* These figures make clear the greatly increased cost per new line as the exchanges grow larger."

5079. That does not supply me with the information I want; that is a statement that that is the increase (you say) of cost you are under; but I want to see the details of that increase and how you get at it; for instance, you have four extra operators for 200 extra subscribers?—Yes.

5080. What is the cost of those four operators?—Will you kindly pose your question? I will have it worked out in figures.

5081. I want to know the details; how you arrive at the extra cost, say of adding 200 to the Liverpool Exchange?—Suppose we were to take it in this way: I have got a certain number of people on the Liverpool Exchange, I will say going at a current outlay; let us assume that the capacity of that particular machinery is exhausted and that we are called upon to enlarge it up to another thousand.

5082. It is done on 200, according to what I saw in Liverpool?—Well, whatever it is.

5083. Take it at what it is?—What will it cost to travel out of one capacity to another? I shall be very happy to consult Mr. Sinclair, who is much more skilled in the detail than I am, I am happy to say, on the proposition.

5084. I do not want to delay the Committee further upon the proposition, as the time is advancing; the point I wish to arrive at is this: that

Mr. *Snape*—continued.

that while we are told the increase is great, as you tell us by these figures you have just read, we have had no details to show this, and all I wanted to ascertain by personal inquiry was, in addition to the four operators extra that are required, what connections are required; you get 200 extra subscribers at 10*l.* each, that is 2,000*l.*, and you have to pay the capital required for the connection of the wires, and you have also to pay the cost of four operators; you have 2,000*l.* to do that with; and I cannot quite see where the increase comes in, nor has any information been given us to show that?—Well, sir, I will see whether we can make it clear to you in a tabular form. I cannot give it you of my own knowledge, nor do I think it can be got out without a good deal of inquiry.

5085. You will hand that in?—Yes.

5086. I do not know whether I ought to ask you this question, but I will; you can choose whether you answer it or not: the question is, whether in the event of the Committee thinking some change desirable in telephonic supply, you, in treating that, would prefer, in the decision to which they might come, that they should decide to buy your concern at a reasonable price for the State, or that they should sanction licences to municipalities to enter into competition with you; or that they should let the licence you hold run out, in which case you would not be entitled to receive anything?—You do not expect I am going to answer that off-hand, do you?

Lord *Stanley.*

5087. You said that since the amalgamation you had spent in sovereigns 1,459,000*l.* Will you tell me how many extra subscribers you got for that?—Yes, 37,739.

5088. At the end of the 16 years you may be bought out by the Post Office; at all events, the licence lapses, and the Post Office may take over the business, or purchase from these other companies. I suppose you have taken two things into consideration: first of all, good-will, and, secondly, material out-goings, such as telephone plant and patents; is not that so?—Yes, we took them as a going concern.

5089. But in the event of the Post Office taking over the telephone, it would not be taken over so much as a going concern; your goodwill would lapse at the end of the 16 years?—Absolutely.

5090. Therefore, what they would have to pay you would be, according to arbitration, the sum that you have expended in placing the telephone plant throughout the kingdom?—In an arbitration at that time?

5091. In an arbitration at that time?—I am afraid I shall not be before the arbitrators, but I think I could find out a claim for something more than that.

5092. Very well; whatever you found out was the claim, that would be the principal part?—Yes, that would be.

5093. There might be other parts of the claim?—Yes.

5094. Any other companies that started would have to be bought out on precisely the same terms as you would, I apprehend?—I do not know, of course, what is in the mind of the Post Office; I know what would be just, that is, to put any competitor upon the same footing as ourselves about the condition of licence and duration of licence.

Lord *Stanley*—continued.

5095. You would expect them to be put on the same terms?—I think that would be reasonable.

5096. In a town where there were rivals to you, the Post Office would have to pay for two separate plants?—Well, they might elect to pay for neither. The honourable Member for Glasgow, I think, put it in that attractive form that it might be worth the while of the Post Office to encourage corporations to drive down the value of our business in order that they might buy us cheap. Well, that is a proposition which it is easy to put.

5097. What I want to get at is, that in one town they might buy two companies, where one would pay; they would have bought two companies, and the two together could not possibly pay?—Yes, that is true.

5098. Then the effect of having rival companies might make it so that the Post Office in buying the plant at the end of the time would be, in places, buying a non-paying concern?—I think they would. I cannot conceive it is the interest of the Post Office to complicate themselves with two or three telephone companies in the same area.

5099. Then in the event of purchase by the Post Office, their object would be, I suppose, to give as efficient a service as you do, but at the same time to give it cheaper?—Yes.

5100. That would be their object?—I fancy so.

5101. They would reduce their prices largely; at the same time that they reduced their prices, would they not at once reduce the number of telegrams that would be sent?—I should think the effect upon the Post Office revenue from telegrams by any very serious reduction of price would be, well, worse than cutting off your nose to spite your face (it must have that effect), with this additional danger, that the multiplication of the means of competing with the telegram will cause extra competition with the telegraph and reduce prices. The margin of profit now is very narrow, and by a very slight reduction of the annual subscription you would do away with the margin of profit altogether; and therefore you stand to lose upon the telegraph revenue; that is, damaged by the increase of machinery to damage it, and you stand to lose by the working expenses of the telephone, absorbing the gross revenue of the telephone just as they now do in the telegraph. That will be the position.

5102. Then by the reduction of the price of the telephones used only by a limited number of persons, it would entail a loss upon the telegraph service used by the majority of the people; therefore the people who used the telegraphs would be paying cheaper rates than for the telephone?—That is it. The State would pay; they would pay the loss upon the great expansion of telephones at 5*l.*, say, instead of 10*l.*; there would be a dead loss upon that upon present figures

Lord *Stanley*—continued.

figures, and putting that great expansion of telephones at 5*l.* they would at the same time multiply greatly the effect of loss upon the telegraph revenue.

5103. And they would lose the royalty that you pay at the present time?—Of course that would go.

Sir *Charles Cameron.*

5104. Might I just ask one question. You said that you could give us the figures. You have no objection to give us the figures at which the New Telephone Company's shares stood in your books, and you have got it, I understand?—Yes, I have looked at our balance sheet since then, and I can now give the precise figures; 439,896*l.* 17*s.* 6*d.*, that is what they stand at; we talked about 750,000*l.* in the prospectus, but I had not emphasised, I think, that of the 10*l.* share only 4*l.* was paid up at the time of this (what shall I call it) transmutation of companies.

5105. And that includes the founders' shares for which 40*l.* was paid?—Yes, that includes the founders' shares. It also includes 180,000*l.* of that money which we have in our business, and the Manchester business, and the outlay upon that, and Bolton, and the Strand site, and certain other advantages which we get in the purchase.

5106. I forgot to ask you whether you could tell us about the United, whether there was any "water" when the United joined the Bell and Edison?—No "water"; they had not any business; or very little.

5107. Was there not 40,000*l.* of "water"?—I do not think so.

5108. That was before your time probably?—No, it was not indeed; I did the whole thing. I found that the Bell (Mr. Edison's friends) had got a patent, and they were going to work that patent; and the other people had got a patent, and they were going to work the patent; and they had each up to that moment spent a certain amount of money. I went into the accounts, and I had to come to this conclusion, that we must assume that each company had done what was reasonable up to that moment, and that the expenditure must be taken as having been a reasonable expenditure to get the thing up to that moment; we put them together upon those

Sir *Charles Cameron*—continued.

proportions. Of course, the bulk of the capital was raised long after that; it was a very small sum at the time.

5109. You merely paid for them the amount expended by each company?—Yes, the formation of the company, the interest which Mr. Edison and those people had; he had some of his in shares. Mr. Bell had some money and so forth. It was a very small amount and quite reasonable. There is one thing, sir, I want to correct. My censors behind me seem to think I have stated that the effect of the establishment of the Mutual Company in Manchester was a reduction of our rates. That is not so; therefore I correct it. They began at lower rates than ours, but we maintained our rate from that day to this, and have increased our subscribers in a greater proportion than they. I only want to have that made clear.

5110. Your rate when they started was not above 10*l.*?—Not above 10*l.*

5111. It was 10*l.* when they started?—Yes, 10*l.* They started subscribers at 5*l.*, outsiders at 6*l.*; and notwithstanding that we maintained our 10*l.* rate, a very large number of their subscribers paid our subscription as well as their own.

Mr. *Tully.*

5112. What is the capital of the two companies (the Bell and Edison Companies) out of which the United Company was formed?—Upon my word, I cannot tell you; but if it is a matter of any moment to this Committee, I daresay I can refer. It was a good many years ago. It is a very small sum. Before I leave the Chair, may I say one more thing: that table which Mr. Benn was good enough to put in about Mr. Burdett's view of our capital is said not to be correct; and, therefore, in the absence of the honourable gentleman I must protest against it being taken as one upon which he could found arguments.

*Chairman.*

5113. I understand that Mr. Benn based his argument upon the number of subscribers (50,000) in the United Kingdom?—Yes.

5114. Whereas, I believe, he was very far short of the mark?—It is 75,000.

## Mr. ALPHEUS CLEOPHAS MORTON, a Member of the House; Examined.

*Chairman.*

5115. I UNDERSTAND you wish to place some information before the Committee, the result of a circular which the Commissioners of Sewers, I think, have sent out to the telephone subscribers in the City?—Yes; I have been asked by the Commissioners of Sewers to submit a summary of what has taken place with regard to the circular which they sent out; and which they sent out because it was stated that the opinion of telephone users had not been got at in the City at all. I shall only take two or three minutes if I read the Report, sir, and that will be the shortest way of placing the facts before the Committee.

*Chairman*—continued.

5116. Very well; if you think it is the best way?—This is the report of our chief clerk, which has been verified to see that it is correct: "Agreeably to the resolution of your honourable Court of the 7th instant, instructing me to ascertain the experience of telephone users in the City of London as to the efficiency and cost of the existing telephone service, I issued on the following day the circular, of which I append a copy, to 3,450 subscribers to the National Telephone Company, which include, so far as I could ascertain, the whole of the users in the City, directing their attention to the inquiry by the Select Committee of the

*Chairman*—continued.

House of Commons, as to whether the provision now made for the telephone service is adequate, and whether it is expedient to supplement or improve this provision, either by the granting of licences to local authorities or otherwise. Answers were invited to the two following questions, and suggestions or remarks on the subject were solicited: (Question 1.) Do you, as a subscriber to the National Telephone Company, consider their service efficient? (If unsatisfactory, state in what respects.) (Question 2.) What is your opinion as to existing charges? I now have the honour to submit a list giving the names and addresses of the telephone users to whom the circular was addressed, and the replies that I have received, 1,085 in number, together with an abstract and summary thereof. Having very carefully perused and analysed these replies, I beg to report that the opinion of the majority as to the inefficiency and costliness of the service confirms in every particular the evidence given on your behalf, by the Chairman of the Streets Committee (Mr. George Berridge) and myself, to the Select Committee of the House of Commons, now inquiring into the subject. How far the investigations of the London County Council, which were commenced the day before those of the Commission, affected the number of replies received by either body it is very difficult to say, but there can be little doubt that the memorandum, issued to their subscribers for signature by the National Telephone Company, some time previously, considerably discounted the inquiries of the Commission, as for obvious reasons it must have drawn largely on the sympathy of telephone users, besides confining the issue to the narrow limits of an invitation to disapprove of the service being undertaken by the London County Council, coupled with a vote of confidence in themselves. I append a copy of this memorandum. It will be observed, nevertheless, that about one-third of the circulars issued have been responded to, and I think it may reasonably be assumed that the views expressed by the majority in regard to cost and efficiency represent the opinion of city telephone users generally. The replies are still coming in, but of those already received, 690, or 63·5 per cent., condemn the existing system as inefficient from various causes, whilst 380, or 35 per cent., are satisfied with it; the remainder, 1·5 per cent., being neutral; 909, or 84 per cent., think the cost excessive; and 109, or 10 per cent., do not object to the prevailing charges, whilst about 6 per cent. offer no opinion on the subject. Two hundred and one subscribers indicated what, in their opinion, would be a fair charge for a telephone, the sums mentioned averaging as nearly as possible 10*l.*, which was the amount fixed by your Streets Committee as being, in their opinion, a reasonable and sufficient rental. To be absolutely accurate, the average of the suggestions is 10*l.* 1*s.* 5*d.* In analysing the causes of complaint, I have divided them under two heads, viz.: those affecting the operators at the exchange; those affecting the system. The causes of complaint against the employés at the Exchange include the following: Delay in answering calls. Further delay in getting connected. Incessant interruptions by exchange operators during a conversation. Frequent cutting off whilst speaking. Noise of voices at exchange. Ringing of call bell in error. Being placed by mistake in communication with wrong numbers. The obligation on the part of subscribers to ring up a second time when line is engaged. General inattention and insufficiency of staff. Of these the chief causes of dissatisfaction are in respect of the delay in answering calls and getting connected, the general inattention of the employés (including a few complaints of incivility and impertinence). The complaints against the system comprise: Difficulty in hearing, through confusion of sounds. Defective insulation. Frequent blocking of lines on account of the number of subscribers. Instruments and wires continually out of order. Delay in executing repairs Want of proper signal for disconnecting. Bad service over trunk lines, and to outlying districts. The larger number of these complaints are as to the difficulty in hearing through confusion of sounds, defective insulation, instruments and wires being continually out of order, and the delay in repairing them. Amongst the remedies suggested are: The adoption of the twin-wire system. Increased staff at the exchange. Second receiver to each instrument. Additional trunk lines and call offices. Improved suburban and provincial service. Improved switching facilities. Better discipline at centre. Employment of men or boys instead of women. The placing of wires underground. Competition. State control. Control by local authorities. Although no direct question was asked on the subject 172 expressions of opinion have been volunteered by subscribers in regard to the future control of the Telephone Service, of which, as will be seen by the following figures, the majority are for public control, the greater number favouring State management: For State control, 57; against State control, 4; for local control, 40; against local control, 12. Of the remainder, 24 advocate the development of the system being left to competition and commercial enterprise, 29 simply express the hope that the service will not be vested in the London County Council, whilst six are opposed to the control being placed in the hands of the Corporation or the Commissioners of Sewers. In conclusion, it is quite clear that the evidence afforded by the replies to the inquiries instituted by your honourable Court, condemns the existing telephone service as costly and inefficient.—I have the honour to be, Gentlemen, your obedient servant, H. MONTAGUE BATES, Principal Clerk." Since this was put in we have had more than a hundred replies, and could get more, because, of course, it was all done in a hurry.

*Chairman*—continued.

Mr. *Tully.*

5117. Are the people who send complaints to you the people who complain to the London County Council?—We do not know; the County Council, of course, had no right in the City at all making inquiries, but how far they got replies I do not know.

5118. What about these surreptitious tubes we heard about; can you tell us anything about them?

Mr. *Tully*—continued.

them?—You mean the tubes put down by the Electric Lighting Company.

5119. Yes?—All I can tell you is that we found out in 1892 that they had been put down without our consent, and, in fact, after we had refused to allow them; we refused, I think, the National Telephone Company.

Lord *Stanley.*

5120. It was not the National, was it?—All sorts of people have been before us; we have had the Electric Lighting Company, we have had the Pioneer Company, we have had the New Telephone Company, and we have had the National Telephone Company, all making inquiries; and at one time the two companies (the National Telephone Company and the New Telephone Company) were competing as to which should get these tubes, and they came before us, and asked us to delay our consent until they could make fresh proposals. When we met again we found that the National Telephone Company had bought up the other company, and there was an end of the competition.

Mr. *Snape.*

5121. Were these subscribers, who thought 10*l.* a reasonable and sufficient rental, business people?—Yes, all business people.

5122. Had you any replies from small tradesmen or families, who would use the telephone, as to the charge?—Of course, we have not got many in the City of London of that sort, but a great many are offices.

5123. Do you think they would suppose that 10*l.* was a reasonable and sufficient rental, small tradesmen and householders?—Yes, that is a general feeling, that it ought not to be more than 10*l.* in the City of London.

5124. You say it was from business people you got these?—So far as we know the small tradespeople are of the same opinion as these.

5125. You cannot form any opinion as to whether small tradesmen would entertain a similar view?—Some of them think they ought to have it for less.

*Chairman.*

5126. Some would like it for nothing, probably?—No, none have put it down at that.

Lord *Stanley.*

5127. You mention 63·5 per cent. as condemning the system as inefficient; that is 63·5 per cent. of the answers received, is it not?—Yes.

5128. That is to say, out of the total number of 3,450, as far as you are aware by their written answers, there are only 5 per cent. who condemn it as inefficient?—Only 5 per cent.?

5129. Yes; I ask you that as a question. Of those who actually answered your letter there are only 5 per cent. who condemn it as inefficient?—Only 5 per cent.?

5130. Yes?—But we have got 63·5.

5131. No; that is 63·5 answers received, you said, of the total number using the telephone?—I cannot tell you that, because we have had a number of answers since (over 100), and they are still coming in; therefore I cannot tell you.

5132. On the paper you put before us only 5 per cent. of the total number to whom you sent out the circular have answered adversely to the company?—I have "63·5 per cent."

5133. That is the number of answers you have received?—Yes.

5134. Of the number sent out only 5 per cent. have answered adversely?—Only 5 per cent.?

5135. Yes; there are only 690 out of the 3,450 *l*—That must be more than 20 per cent., looking at it roughly.

5136. Yes; it is more than "5 per cent." It is my mistake?—It is not fair to make any calculation on the people who did not answer. We have had no time. We did not send canvassers or take any trouble at all.

5137. It is 20 per cent.?—It is about 20 per cent., looking at it roughly.

Mr. *John Ellis.*

5138. I understand this inquiry has been made since Mr. Bates was here on the 26th April?—Yes.

5139. And it is to supplement his evidence, given in Questions 1958 and 1959?—That is so.

Mr. WILLIAM BEVERIDGE, called in; and Examined.

Sir *Charles Cameron.*

5140. YOU are acting for the city of Glasgow in connection with this telephone matter?—Yes.

5141. The Telephone Committee or the authorities of Glasgow, in order to test the actual state of feeling among the telephone users in Glasgow with regard to telephones, took the step of submitting a statement for signature by those who approved of it?—Yes, they did.

5142. Would you please read the statement?—The statement is as follows: "Telephone Service. The House of Commons having remitted to a Select Committee to consider and report whether the provision now made for the telephone service in local areas is adequate, and whether it is expedient to supplement or improve this provision, either by the granting of licenses

Sir *Charles Cameron*—continued.

to local authorities or otherwise, we, the undersigned, users of telephones in Glasgow, desire to express our dissatisfaction with the present telephone service in the city, which we consider inefficient and expensive." That has been sent.

5143. Just allow me to get out the facts; I think you have a list of the telephone users in the book of the Glasgow district?—Yes; I have a copy of the book.

5144. You have reckoned up, and you find that there are 4,791 in the book?—Yes.

5145. Of these you find that 382 have more than one telephone?—Three hundred and eighty-two represent wires used by more than one individual.

5146. That reduces the number of persons having

Sir *Charles Cameron*—continued.

having telephones to 4,409?—Yes; so I make it from the book.

5147. And those sheets you have before you were exhibited in public places?—They were sent round by the Corporation messengers.

5148. To telephone users?—To telephone users.

5149. And the sending round occupied some three days, did it not?—About three and-a-half or four days.

5150. That statement has received 1,018 signatures, has it not?—Yes, 1,018.

5151. You have gone very carefully over those signatures, and compared them with the book to see that they are the signatures of telephone users?—Yes, I have.

5152. Do you find that there are 20 signatures given a second time, and two given thrice, probably men who have more telephones than one?—Yes.

Sir *Charles Cameron*—continued.

5153. You deduct, therefore, 22 for that reason?—Yes.

5154. That brings the number down to 996 out of the 4,409?—Yes,

5155. You also wish to state that there are 15 or 18 names that you cannot make out?—Yes.

5156. The signatures are not legible?—They are not quite such that I can make them out, so as to compare them with the book.

5157. But even deducting those, knocking those off too, because you have not been able to identify them, that would give you about 970 names that you have actually identified, names that you have checked from the book of telephone users, out of the 4,409 who have subscribed their names as evidence of dissatisfaction?—Yes, that is so.

Mr. JOHN CAMERON LAMB, C.B., C.M.G., called in; and further Examined.

*Chairman.*

5158. IN the first place you were asked, when you were in the witness chair before, for information upon one or two points, by various Members of the Committee. Would you just shortly state the information you have in answer to those applications?—Yes. In the first place, some Members of the Committee asked for information about foreign countries. I prepared a statement from information that we had in the office, and it was put in by Mr. Preece. On this statement there are one or two questions in regard to Germany. The statement says that the system there is a single wire system, but some of the Members of the Committee questioned it; I have therefore made an application to the German Administration, and they tell me that it is a fact that it is a single wire system throughout Germany. Then I have a correction to make, sir. These words occur in the fourth column opposite "Germany": "It is known that in the case of adjoining towns, such as Hamburg and Altona, the subscribers in the one place have to pay an additional subscription of 7*l.* 10*s.* a year if they wish to speak to those in the other." Well, that statement was due to a mistranslation, and I find that what has to be paid is not 7*l.* 10*s.* a year, but 2*l.* 10*s.* a year; that is to say, if a person living in Altona is a local subscriber, and only wishes to speak to people in Altona he pays 7*l.* 10*s.*; but if he wishes to speak to any one in the neighbouring city of Hamburg (which is practically one with Altona; there is absolutely no division between them; they are quite as much one as Manchester and Salford), he has then to pay the additional sum of 2*l.* 10*s.* a year. Then a question was raised as to wayleaves in Germany, and it was stated that it was not a fact that, in Germany, wayleaves were free. I have got here a translation of the actual words used by the German Administration in answering the question we put to them, and this

*Chairman*—continued.

is a literal translation: "The Railway Administrations, and the Administrations for the Construction of Roads, are under obligation to grant free the use of the ground occupied by railways and streets for laying aërial and underground telegraph lines. A right to use private land in the construction of telegraph lines is not possessed by the Imperial Administration of Posts and Telegraphs."

5159. Would that mean that they have got free wayleaves over the railways and the roads, but not over private property?—That is so; but in the next answer they go on to make a reference to private property. In the answer which I have quoted they have said that they have no rights; but in this next answer they go on to say what the facts are as to payments; and this is the answer: "In those cases in which the use of land not belonging to the State has been unavoidable, the respective owners have almost without exception given their consent without claiming compensation."

5160. That is to say, although there are no strict rights?—As a matter of fact, it is free.

5161. Whereas in this country we have to pay considerably for those wayleaves over private property?—Yes. Then it is stated here in this printed document which has been handed to the Committee, that in France the Commission on the Budget of the current year has reported against a reduction of rates for the present. That I have ascertained from the actual report of the Commission, which is here.

5162. A decision against reduction?—Against any reduction of rates.

Mr. *Snape.*

5163. What Commission was that?—It is the usual Commission appointed every year on the Budget of the year, to report to the French Legislative House whether the estimates that have been presented by the various departments

Mr. *Snape*—continued.

partments of the State ought to be passed or not.

5164. Then it is the Commission de Corps Legislatif?—Of the French Parliament.

*Chairman.*

5165. It is appointed every year to consider the estimates?—Yes. Then against "Germany" it is stated that the Postmaster General has declared in the Imperial German Parliament, in a discussion on the estimates for 1895–96, that it was impossible at present to reduce the rate there. Well, that, again, I have got from an official report of the speech of the Postmaster General of Germany. I mean to say that it is authentic. A question was raised in regard to Italy. The question, I think, was something like this: whether in Rome, where there is competition, the rates were not lower than in Milan, and other places where there was no competition. That is so, sir; but I think it ought to be remarked that under the present law competition is not allowed. The competition in Rome began before the law was passed, and the Italians have passed a law against competition; and that is the reason why there is only one company operating in each town outside Rome.

5166. Was that law passed in consequence of the belief which existed in the Italian Chamber that competition would be detrimental to the telephone service?—I am sorry I cannot answer that question; I can only state the fact that the competition in Rome began before this law was passed, and then the law was passed against competition; and that is why there is not competition in other towns.

Mr. *Tully.*

5167. Have they put any restrictions on the company with regard to the maximum dividend and the maximum charge to the subscriber?—That I am afraid I have not ascertained.

5168. Is not that one of the chief points?—I am afraid that information is not at our disposal; there is one other point, namely, that the larger company in Rome has the higher subscription; the company with 1,750 subscribers charges a subscriber 6*l.* 14*s.* a year; and the company with 600 subscribers charges 5*l.* 10*s.* a year. Then, I think, there have been questions raised as to whether greater facilities are not given in other countries than in this country; with regard to that point I find that in Norway everyone who wishes to telephone a message to a post office for onward transmission as a telegram has to pay an additional sum; either he has to pay or the telephone company has to pay; there is an additional charge; and in Sweden there is the same state of affairs; private telephone companies pay for the right of sending messages by telephone to the telegraph office a yearly subscription fee of 50 crowns for each wire to the telegraph office, and the subscriber pays for each message an additional toll of 10 ore.

*Chairman.*

5169. That is for a service which will be, under the agreement in this country, given free to the subscribers of the National Telephone Company?—Yes. By way of supplement to the statement which has been handed in, I may say that a law has recently been passed in Switzerland (and it will probably come into operation on the 1st of January next year) under which the terms of subscription will be modified, and any person who has 800 conversations in a year, or more, will pay substantially more than he does at present in the first and second years. They recently discovered that there was a deficit on their telegraph account, the telegraph and telephone being combined, and I can only suppose that they have adopted this new method of charge in view of that deficit.

5170. But it is a new basis of charge, which would mean an increased charge to the large users of the telephone?—To every man who speaks 800 times a year, or more.

Mr. *Tully.*

5171. Is not that practically 2½ calls per working day, the 800?—I have got it worked out exactly. This is how the thing works out: Under the old tariff, if a man had 800 conversations in a year, he paid 4*l.* 16*s.* for the first year, 4*l.* for the second year, and 3*l.* 4*s.* per annum afterwards. Under the new tariff he will pay 5*l.* 12*s.* for the first year, 4*l.* 8*s.* for the second year, 3*l.* 4*s.* for the next year and succeeding years; so that at the third year, and afterwards, it is the same as before.

*Chairman.*

5172. But for the first two years substantially a heavier charge?—Yes. Take another example. A man with 1,600 conversations pays under the present tariff 6*l.* 8*s.* for the first year, 5*l.* 12*s.* for the second, and 4*l.* 16*s.* for each succeeding year. Under the new tariff he will pay 7*l.* 4*s.* for the first year, 6*l.* for the second, and 4*l.* 16*s.* for each succeeding year. While these actual increases are taking place, we have the opinion of the Director General of Sweden that the present rates in that country are too low, and we have a recommendation in Norway, of a Committee appointed by the Government, that the rate for Christiania should be raised.

5173. Then the general effect of that is that in European countries there is a tendency to raise rather than diminish the rates charged to subscribers?—That is the point, sir.

Mr. *Tully.*

5174. Are not their rates about one-half the rates here?—In Paris, the rate of 16*l.* a year I should not regard as being lower than the rate in London, considering the service, especially as the subscribers there have to pay for their own telephones.

*Chairman.*

5175. Does that deal with all the points?—There is only one thing more that I think I ought to call special attention to in this statement, and that is that in Austria, Germany, and Hungary, there is a triple charge for urgent conversations,

*Chairman*—continued.

conversations, and as the business conversations are largely urgent, when you ask yourself what the charge in these countries is, you have really to say three times the charge given in this statement.

5176. And the urgent conversations have precedence over the other conversations which are charged for at the lower rate?—That is so.

5177. Therefore the low rate which has been quoted does not mean the immediate connection with the subscriber to whom you want to speak, but you have to wait until the urgent conversations have taken place over junction wires or whatever the wires may be?—That is so.

Mr. *Tully.*

5178. Is not that something on the plan of deferred messages?—It exactly corresponds with them; yes. And with reference to the question the Chairman has just put, the comparison between the proposed charges in this country and the charges in Austria, Germany, Holland, Hungary, and Roumania, is fairly favourable to this country, even without taking into account the triple charge; because I find that within 20 miles the charge here will be 3*d.*, while in Austria and Germany it is 6*d.*, in Holland it is nearly 10*d.*, in Hungary it is 1*s.* 8*d.*, and in Roumania it is 1*s.* 2*d.*; and even if you go up to 40 miles, here it would be 6*d.* against 10*d.* in Austria, a shilling in Germany, nearly 10*d.* in Holland, and so on. Then there were one or two questions asked in reference to an answer of Mr. Forbes. It was asked whether the number of telegrams given in the International statistics for France included messages sent through the pneumatic tubes. The answer is in the affirmative. The Director General has sent me the actual figures for 1894.

*Chairman.*

5179. It was only that one point, I think. It did include what are called "card telegrams"?—Yes; the point is that Mr. Forbes' deduction was sound. I was asked also to get information about the purchase of the telephones in France. I have written to the Director General, but I have not received a reply; I am sorry therefore I cannot present that information. I could give some extracts from newspapers if that was of any use.

5180. No, but I think if you get the information in the course of the next week or 10 days you might add it?—He is extremely courteous and friendly, but he may have some reason for not giving it. I believe the case is scarcely out of the Law Courts yet.

Mr. *Tully.*

5181. Are the telephones in France in the hands of a company or of the Government?—In the hands of the Government; the Government purchased them.

5182. Then it is the Government that charges the rate of 16*l.* in Paris?—That is so. Then I was asked whether I could give any further evidence as to the effect of the telephone on the telegraph, and I have obtained a report from the Postmaster of Liverpool, amongst other officers. If you thought well I could read that.

Mr. *Tully*—continued.

*Chairman.*

5183. If it is in the form of a report perhaps it might be put in, if you just give the effect of it?—It is very short.

5184. Then perhaps you had better read it?—This, I ought to explain, relates to the traffic within the Liverpool district, and within the area to which the Telephone Company will be confined around Liverpool. This is purely local. "It will be seen from the accompanying return that the local traffic increased every year until 1892, when the increase was only 33 over a week in the previous year. Since then the number of local telegrams has rapidly declined. It is known that during the past few years the telephone facilities have been largely developed in the Liverpool area, and the conversations between local renters are believed to be very numerous indeed. The number of local telegraph offices has been increased by 24 since 1886, and in ordinary course this increased accommodation would have developed the traffic. It is therefore obvious that not only the arrested development, but the serious decrease in telegrams is attributable to the rivalry of the Telephone Company. I may add that the National Telephone Company have now nearly 6,000 renters in the present Liverpool telephone district. Such an extension of telephone facilities must not only arrest the normal development of the local telegraphs, but as time goes on those facilities will become more and more appreciated, and the injury to the telegraph local traffic (the most remunerative portion of the telegraph business) must be very grave indeed. I am not aware of any other cause that has hindered the local telegraph service, which, I may remark, has for years had my special attention, and is exceptionally well managed." And these are the figures. The total number of local telegrams during a week in April 1885 was 1,390. The same week was taken every year, the figures running year by year in this way:—first year, 1,390; second year, 2,989; third year, 4,009; fourth year, 4,283; fifth year, 4,358; sixth year, 5,669; seventh year, 5,951; eighth year, 5,984 (that reaches the year 1892, to which the Postmaster refers in his report); next year 5,547, a reduction of 437; then 5,566; and then in the current year, 5,004; they have gone down from 5,984 to 5,004.

5185. Those are three years when there was more serious telephonic competition?—Yes. As regards inter-town telegraph business, he reports as follows: "Since December, 1890, a return has been kept for one week in each of the months of March, June, September, and December, the object of which has been to ascertain the amount of traffic from Liverpool to London, Manchester, Birmingham, and Leeds, and *vice versâ*, telegrams signalled to these towns for 'onward' transmission not being included." What he means

*Chairman*—continued.

means by that is, that it is absolutely the traffic between Liverpool and those towns, and does not in any way include messages that come to London, for instance, for transmission to Brighton or other towns beyond London. I will give shortly what the result is. The messages to and from London have gone down from 29,476 in 1891 (in a week) to 23,728 in 1895. In the case of Manchester they have gone down from 5,122 in the year 1891 to 3,842 in the year 1895. In the case of Leeds they have gone down from 795 to 684. And in the case of Birmingham they have gone down from 1,633 to 1,299. The percentage of decrease is as follows: London, 19; Manchester, 25; Leeds, 14; and Birmingham, 20. Then he goes on to say: "In the case of Belfast, where the telephones have not been competing, there has been an increase of 23 per cent."

5186. Between Liverpool and Belfast?—Yes; that is an example of what might be expected where there was no competition.

5187. Would that correspond roughly to the average development in the country, should you say?—I am sorry I have not worked that out; I think it would. I have similar testimony from Norway, but I do not know whether it is necessary to give it.

5188. What is the result of the evidence?—This is a tabular statement extracted from the report of the Committee appointed by the Government to consider the question whether the telephones in Norway should be transferred to the State, and I can simply put it in. (*The three documents were handed in.*)

5189. Does it show generally the same effect of the telephone upon the telegraph?—Yes, it fully supports from Norwegian experience what the Postmaster of Liverpool says with regard to our experience. I think I have now said something about all the questions on which members of the Committee wished me to give information. I do not remember anything more. I do not know whether you would wish me to say anything about what has been said by some of the witnesses.

5190. There has been some evidence given with regard to the statement made by the witnesses on behalf of the Post Office; have you anything to say upon those, or upon any points dealt with by those witnesses?—I think I should like to remark generally on the very wide divergence between the several estimates that have been given by the witnesses whose statements have been put in. For instance we had an estimate from the engineer of the London County Council of 400,000*l.* for London as compared with an estimate by another gentleman of 76,600*l.* Then we had some evidence given by General Webber with reference to London. I do not know that one need very much criticise the details of his estimate, because in the result he gave an opinion that a subscription of 16*l.* a year for the City of London (if any subscriber wished to communicate with all the other subscribers in the City of London) would not be unreasonable, and I do not think that that is a final result that we need regard as being in any way too low.

*Chairman*—continued.

5191. Did not General Webber go beyond that. I think he admitted that the present charge, which is 17*l.*, was not an unreasonable charge for a service extending over the whole district?—I think he did; and therefore, in regard to his conclusions, I should not say that his estimate of the proper charge to be made to the public was in any way under the mark.

5192. With regard to his small confined districts, you mean?—Yes.

Mr. *Tully.*

5193. Would not he mean connection with 50,000 subscribers under his system, and that they are only connected with 8,000 at present?—He suggested that he had provided in his scheme for 28,000 subscribers within the City of London.

5194. Then the 16*l.* would mean 50,000 subscribers?—He said, I think (I speak subject to correction) that a charge of 16*l.* a year would be reasonable within the City, but if a subscriber wished to speak beyond that a higher charge should be made.

5195. The number of subscribers he referred to was far greater, was it not?—That is so. I think if there were time to examine the details of the estimate it would be found that they were open to criticism. I could mention two salient points which would not take up very much time; the first is, that there is no provision in his plan for junction wires between the exchanges. I have seen the plans, and there is no provision for junction wires between the exchanges. I happen to know why there is no provision for such wires. The Duke of Marlborough saw me several times at the Post Office, and it was his desire that the Post Office should supply the junction wires. Estimates were prepared of the cost of these wires by the late engineer-in-chief, Mr. Graves, and were submitted to the Duke of Marlborough. No actual agreement was arrived at, but they were a subject of friendly conversation, and they appeared to be accepted by him as reasonable estimates. The estimate for junction wires for London generally was 178,000*l.*, and for the City proper the amount was about half that, or 89,000*l.* What I desire to point out is that that capital expenditure is not included in General Webber's estimates.

*Chairman.*

5196. Does that apply to the other estimates that were put in on behalf of the London County Council?—No, it does not.

5197. Only to General Webber's?—That is so. Mr. Binney, for instance, I think, clearly mentions junction wires.

Mr. *Tully.*

5198. General Webber said something about using those pipes that we were told were put in surreptitiously?—His plan provided for the use of those pipes to serve subscribers from the exchanges that he had devised; but those

Mr. *Tully*—continued.

pipes (laid in the trenches of the Electric Lighting Company) did not provide for communication by junction wire between the exchanges, by means of which alone the subscribers on one exchange could get into conversation with people on the other exchanges.

*Chairman.*

5199. As a matter of fact, as the pipes have come up, are they suitable for telephone purposes, telephone wires?— Well, I remember having a very prolonged discussion with our late engineer-in-chief on the subject, and he, after inspecting the pipes, gave it as his very decided opinion that they were not suitable, and he could not recommend the Post Office to take any means to get the use of them for its own purposes; his advice is concurred in by the present engineer-in-chief of the Post Office, Mr. Preece; and I must say that I myself (although I am not an engineer) should not like to take the responsibility of recommending that those conduits should be used. I have seen how they lie, and how difficult of access they would be, lying, as they do, in many cases absolutely under all the conduits of the electric-lighting cables. Of course, my evidence must be taken as that of a layman and not an expert; but I certainly should not like to recommend that they should be used. Then another point, sir, is, that General Webber has assumed that there would be 28,000 subscribers in the City. Well, recently there has been some information obtained by Mr. Salmon (who I think is a member of the Common Council) as to the number of tenancies in the City of London. I think that he obtained this information with reference to the statistics in the Imperial Census. His careful statistics show this: that there are only 27,827 separate tenancies in the City of London. That, I ought to say, excludes the Inner and the Middle Temple; but if they were included (I have not got the exact figure, but I know about what it is) it would only bring up the total number to a little more than 29,000.

Sir *James Fergusson.*

5200. May I ask, does that reckon such rabbit warrens as Mansion House Chambers as one tenement?—I have made particular inquiry by one of my officers, and he is assured that every separate office in such a building is counted as a tenancy.

*Chairman.*

5201. Then, according to that, excluding the Inner and Middle Temple, he assumes a larger number of telephones in the City than there are tenements of the kind you have described?—That is so. I do not make any comment on that.

5202. I do not think it is necessary; I think the Committee can come to a conclusion?—Yes.

5203. What is the population of the City during the day?—The working population of the City is about 300,000.

Mr. *Tully.*

5204. During the busy part of the day?—Yes, the working population during the busy part of the day. I am sorry I cannot give the exact figure; but I know it is a little more than 300,000; that is, the people who are at work in the City during the daytime, including employers and employed.

5205. Would that population be as large as the population of some of the foreign cities that have an immense number of telephones?—I think if the honourable Member will work out the proportion of users of telephones at the present moment to the population of 300,000, he will find that the proportion in London is greater than in many foreign cities.

*Chairman.*

5206. Mr. Berridge gave evidence that it is as you state; about 300,000?—Yes; and I think that if the number of subscribers in the City of London were worked out with reference to that, it would be found that there are more subscribers in proportion in the City of London than there are in many foreign cities. I ought, perhaps, to add that those statistics are supported by an independent count, which has been made by the same gentleman, of the number of employers in the City of London, which almost exactly corresponds.

Mr. *Tully.*

5207. There is no confusion between you and General Webber as to the area that you are speaking about, is there?—I do not think so; I think General Webber spoke clearly of the City of London proper.

5208. He calculated for more telephones than there are offices there to use them?—That is the conclusion.

*Chairman.*

5209. What is the next point under this head?—There has been a point raised to-day about the efficacy of Post Office competition. Well, I may mention one case in which the theory, at any rate, of Post Office competition was brought in with good effect. Some few years ago a community of commercial men in the City of London found that they were not being properly served by the then United Telephone Company; they came to the Post Office, and the Post Office said that, in accordance with the notice which appears every quarter in the Post Office Guide, it would be prepared to supply them with what they wanted if they would make a clear and definite request for it. Well, this assurance enabled them to go to the United Telephone Company, and get exactly what they wanted, and they came to us afterwards, and said they had got what they wanted, and therefore did not propose to trouble the Post Office.

5210. That is to say, under the threat of Post Office competition the United Telephone Company became reasonable, and gave them a service which satisfied them?—That is so.

*Chairman*—continued.

5211. Do you deduce from that that the National Telephone Company under similar circumstances might, under the same kind of pressure from the Post Office, become reasonable if in any case they were proved to be giving an inefficient service?—I think it is a fair deduction?—This is an actual case at any rate; it is not a theory.

5212. That is an actual specific case?—It is. There was one little point raised to-day as to whether municipalities would not be free from all payment for the use of their own streets. Mr. Forbes, I think, in reply said, that of course the municipality would have to pay for wayleave on private property; but there is this further thing that perhaps ought to be said: The Post Office does not pay wayleave for the use of streets or for putting its wires underground. I merely state this as information. The Post Office and the municipality would be in the same position.

Mr. *Tully.*

5213. That is to say, if the Post Office and municipality were competing?—Well, I rather put it as a statement of fact, that the Post Office now does not pay municipalities for the use of the streets.

*Chairman.*

5214. But the Post Office has to pay wayleaves for attachments to private property?—Yes. In going through the points on which I have been asked to give information, I omitted to mention one. I think the honourable Baronet the Member for Glasgow asked whether there was anything further that could be stated with reference to Mr. Raikes' policy. Since he asked that question I have furnished him with an extract from "The Times" giving a report of a speech, and that is all I can find of Mr. Raikes' public utterances. But I do know partly what the views of Mr. Raikes were, and if it were thought necessary I could state them.

5215. Are they borne out by his public statements, or are they different from them?—I think they are only borne out by his acts.

5216. If you can state them shortly, it may be as well?—He was at one time in favour of giving additional licences, and as a matter of fact he did give a licence to the Mutual Telephone Company, but I can state from positive knowledge that he was disappointed with the result. He was especially disappointed when he found that the Mutual Telephone Company changed its character, and had its articles of association altered to permit it to pay a dividend of 10 per cent., and thus (as he thought) ceased to be a mutual company. He was disappointed again when it came to his knowledge that the Mutual Telephone Company had proposed to sell itself to the National Telephone Company; a transaction, I believe, which never came off. In view of the result of his policy in giving this licence to the Mutual Telephone Company, he formed a different opinion. That opinion was that the Post Office should actively compete with the licencees.

Sir *Charles Cameron.*

5217. On that point you say he disapproved of the proposed intention of the Mutual Company to sell itself to the National, and that that did not come off. Do you know why that did not come off?—No; I have no knowledge. I am only speaking as to how Mr. Raikes' views were affected by events as they happened.

5218. Mr. Raikes disapproved of all the amalgamations, did not he?—He did. Finally, I am aware of this: that Mr. Raikes saw reason to abandon his policy of active competition, and my belief is that he formed the opinion that, at a convenient time, the State ought to take over the whole business. That is all the information I can give with reference to Mr. Raikes' views.

*Chairman.*

5219. He made no statement in public with regard to the former portion of that statement?—No, not that I can remember. I found myself unable to give a statement just now of the proportion of users in the City, but I can give it for the whole country. In Great Britain there is one subscriber to the telephone service out of every 520 people; in Germany there is one subscriber out of 600 people; and in France there is one subscriber out of every 1,670 people; which shows that, as regards the greater countries of Europe, Great Britain is fairly in the front.

Sir *Charles Cameron.*

5220. Can you continue that to some of the smaller countries?—I could work it out, but I have not got it. There is another matter to which it seems desirable to call attention, and that is that everywhere competition is giving way to one system; even in Scandinavia the tendency is to have one system.

*Chairman.*

5221. As a matter of fact, there are very few places in Europe where there is competition?—Very few. The statement that has been put in shows that the telephone is in the hands of the State already in the case of France, Germany, Austria, and Belgium, and that it is in process of acquisition in Sweden; that it is wholly in the hands of the State in Switzerland; and that in Norway a committee appointed by the Government has reported in favour of the same thing.

5222. Of the State taking it over?—Yes.

Sir *Charles Cameron.*

5223. When you say there is more or less a tendency to monopoly everywhere, that is State monopoly?—Even where it is not a State monopoly, there is the same tendency to the placing of the undertaking in the hands of one authority. In Italy, for instance, by law only one licence is given in each town.

5224. Is that monopoly confined to any single company?—I am sorry I cannot anwer the honourable Member about that.

*Chairman.*

5225. Then have you any general statement to make with regard to the question of rates in addition

*Chairman*—continued.

addition to what you have said already; I think you have mentioned that there is a tendency against the reduction of rates in foreign countries, and in certain instances in the direction of raising rates?—I think a great deal could be said about that, but, to state it shortly, I should say that the evidence which has been given with regard to low rates in foreign countries does not appear to be applicable to our case, because the circumstances are different; and that the evidence which has been given with regard to low rates in this country is the evidence of persons who have merely made estimates and have had no practical experience of the administration of the telephone. Not one of the gentlemen who has given an estimate has had six months' experience of practical administration; that is, administration taking into view every possible item of expense, not merely engineering expense, but the whole expense of management. In that view, and also seeing that we cannot entirely shut out the question that the State may have to take over the telephones in this country some day, I should say that prudence would point to considerable caution in regard to any general reduction of rates, or any policy which would bring about a reduction of rates. As a servant of the public, I certainly should not like to have a part in the taking over of a depreciated business, on which there might be a risk of loss to the general taxpayer. I say that prudence would point to the rates being maintained at a fair point, which would afford a certainty of profit, and while I should hope that some day, if the telephones did come into the hands of the State, it would be possible to reduce the rates, I should, as an administrator, like to proceed upon the ground of actual experience, and not on the ground of mere estimate.

5226. I think you have mentioned that in Sweden the Director General of Telegraphs had come to the conclusion that the rates had been lowered too much?—Yes; and an honourable Member, who, I am sorry to see, is not here asked whether that was not tainted evidence, because it was the evidence of a telegraph director; but in reply to that I think one might say it was the evidence of a man who was endeavouring to take the telephone business over, and therefore whose interest it was to put the best complexion upon the matter, and if he, in view of the public in Sweden, could actually declare that he proposed to raise rates, I should say that evidence from such a man was very strong indeed, considering that he was under the strong light of criticism of the public of Sweden, who must, of course, be watching the whole of his proceedings; and the same thing applies, I think, to the committee appointed by the Government in Norway: they also propose to increase the rates, and yet they are proposing what they regard as a popular measure for the taking over of the telephones by the State. If, in view of their desire that they should be taken over, and of their desire to make a good case for the transfer, they can nevertheless boldly declare that the rates ought to be raised, I should call that rather strong evidence.

*Chairman*—continued.

5227. There is one question I want to ask you with reference to estimates. You heard the evidence given by Mr. Preece with regard to the cost of laying down a system in London; do you concur in the estimate Mr. Preece produced?—Yes.

5228. And was that estimate the result of practical experience of the officers of the Department in actual work of a corresponding kind carried out by them?—That is so.

5229. And you say that an estimate of that kind is far more reliable than the estimate given by a gentleman of possibly some experience, but not of practical experience in carrying out work of the sort?—That is so, sir. I may perhaps say here that where General Webber's estimates were on the same lines exactly as the estimates of the Department, they agreed. For instance, he said that the cost of a light line in the country with poles and one wire was about 30*l.* a mile. There is nothing cheap in that; that is simply the ordinary estimate we should give of a light line of telegraph. I do not know that I have anything more to say. If there was more time I could say more, but I do not think it is necessary.

5230. You have dealt with the principal points that have arisen in the course of the inquiry?—I think so.

Sir *Charles Cameron.*

5231. You mentioned in one case the potentiality of the Post Office competition which had induced the United Company to grant facilities that were desired by a certain number of subscribers?—Yes.

5232. Do you recollect the Association of Telephone Users applying to you, or what afterwards became the Association of Telephone Users; I am not quite certain whether they had then been formed into a registered association; do you remember them waiting upon you after the time of the limited company?—Yes.

5233. It must have been in the time of the National Company?—Yes.

5234. They asked for an improved service?—Yes, I remember.

5235. The answer then was, or at all events, the potentiality of Post Office competition did not eventuate in anything else?—Speaking from memory, I think that those gentlemen got an answer very much like the answer that the other people had got; they were pointed to the notice which appears every quarter in the Post Office Guide.

5236. But, at all events, the step that they did take was to get a number of subscriptions to the New Telephone Company, and by the potentiality of external competition to achieve, if not everything they desired, at all events (we have been told) a considerable step in that direction?—Yes; I think after they saw us they came into communication with the Duke of Marlborough, and I can only suppose that they thought that the Duke of Marlborough might be able to do more for them than the Post Office. That is a matter

Sir *Charles Cameron*—continued.

matter of conjecture, of course; I can only suppose that that was their conclusion.

5237. If they had given you a certain number of subscribers, you would have started the exchange?—I think we should have been bound to do it.

5238. Have you a minimum number?—No.

5239. You judge every case on its own merits?—Quite so.

5240. Would 950 out of 3,450 dissatisfied subscribers be a sufficient inducement to the Post Office to start competition?—I think the honourable Baronet must kindly pardon my not answering that, because I am not here in the quality ——

5241. Of an administrator. I quite understand that, but I wished to know whether there was any rule you could express?—No, there is no rule; every case would be carefully considered by the Postmaster General on its merits.

5242. You told us about the danger of too low telephone rates, but assuming that the telephone in this country could be developed to the extent in our big towns, which is to be found in the big towns on the continent, such as Berlin, and so on; and assuming that it could be developed in the country, where it is absolutely undeveloped to the extent that it is found developed in some of the smaller countries, the potential business taken over by the Post Office would be to a very large extent undeveloped, and would it not be a very great feeder, or might it not be used as a very great feeder, to the telegraph service?—I think the telephone service is always, to a certain extent, a feeder, but in the general result it is a competitor.

5243. Yes; but it would be in the hands of the Post Office. Do not you consider that every post office that is established, even if it is successful, attracts a big current of letters from all parts, and greatly stimulates the postal work?—I have no doubt it does.

5244. I know that it has been the opinion of many eminent postal authorities that the telegraph was a feeder to the postal service, that it induced more letters?—That was Mr. Scudamore's opinion; but I do not think that if Mr. Scudamore were here, he would admit the same thing with regard to the telephone.

5245. It is stated, I know, that in many continental countries it is regarded as a handmaid to the telegraph, and if facilities are given for the interchange of telephone messages with the telegraph system, and the one plays into the other's hands, that proves a valuable feeder for the State. You do not hold that view?—I am quite prepared to say that, whatever the facts are, I should hold, and I think the Post Office would always hold, that the public ought to have the facility of the telephone whether it affects another facility or not. Any facility demanded by the public ought to be given, whether it has an adverse influence on the provision of some other facility or not.

5246. Telephones are telegraphs; we start from that proposition?—Yes.

5247. You are aware that in many countries where the State has the telegraph, there is co-operation with public authorities; for instance, in many countries you have got a system of



Sir *Charles Cameron*—continued.

parochial telephones where a wire is run in from a village to the trunk line at a certain expense on the part of the village, and is taken over by the State as soon as it pays. Do you know that?—We have a somewhat similar system in this country with regard to telegraphs.

5248. You have a guarantee system with regard to telegraphs?—Yes.

5249. But you are aware of that system. I could name a number of countries, France, Switzerland, and half-a-dozen other countries?—I think in France the localities contribute to the first cost.

5250. And that, in certain countries, such as Switzerland and Norway, has given rise to a very wide network of rural telephones?—Yes; I do not see in the least why that should not take place in this country.

5251. There has never been any attempt under the present system, where licences are so difficult to get, to bring about that system; you think it should be in the hands of the Post Office?—I think so, yes.

5252. I am entirely with you about the entire system being in the hands of the Post Office, but the Post Office has not made a movement to cover this territory that, so far as the telephones are concerned, has never been invaded?—The Post Office is every day extending the telephone into rural districts for telegraph purposes, and I see no reason why those telegraph lines should not be used for telephonic communication.

5253. In the hands of the Post Office, you could work the telephones and the telegraphs to a certain extent together, along the same wires, as was explained by the Postmaster General of New Zealand?—That is so. I think I ought to remark that here, where we have telegraph wires worked by the powerful currents necessary to operate the Wheatstone automatic instrument, it would be a somewhat difficult matter to work single telephone wires on the same poles; it would be impossible.

5254. You have found fault with Major General Webber's estimate, and other people's estimates, and so on, and I have no doubt you have very properly expressed your own view (the Post Office view) that those things would not pay?—Pardon me; I do not quarrel with the general's conclusion; at least, I do not quarrel with it in this sense: I do not think the estimated charge of 16*l.* in the City of London is low.

5255. At all events, you do not agree with many of his figures?—That is so.

5256. But from the broad point of public policy, is it not an advantage, for instance, to the public of Manchester, if the Manchester Ship Canal is made, whether it pays or not; or if an extra railway communication is opened up with any portion of the kingdom, whether it pays or not; the paying is a matter for the shareholders, is it not?—Well, I am afraid I do not agree with the honourable Member; I think that when money is wasted the nation must feel it in some form. I do not believe that any money can be wasted without the nation feeling it.

5257. Well, the nation must feel a good deal, then. At all events, any argument on that point would strike at the whole root of competition in everything;

Sir *Charles Cameron*—continued.

everything; railways, ships, trades, and everything else, would it not; you have certain men undercutting and ruining themselves, but still competition goes on?—Yes; but I think this is a different case. This business is distinctly declared by Parliament to be a monopoly, and has been conferred on the Postmaster General, and therefore I think that a very serious responsibility would rest on the Postmaster General in dealing with it, because he has to give an account of his stewardship some day.

5258. I should be very sorry that the Postmaster General should do a foolish thing?—No, but that is of the essence of the whole thing. If the Postmaster General encourages a policy under which the thing could not possibly pay, and there must be a great loss, that whole thing has to come back on his hands some day as a bad bargain.

5259. If a company or individuals persuade him that for 500,000*l.* he can do as much under improved methods as has been done for a million of pounds, and if he is allowed to do so, at the end of the time, would not the Postmaster General find himself with a choice of two systems, the best of which, or the cheapest of which, only he need acquire?—I do not agree with the honourable Member; I do not think he would find himself with the choice.

5260. At the present moment, supposing the 16 years were at an end, what would be the position of the Post Office; it would either have to buy up the single system that had occupied the field, or to prolong the time, would it not?—No, certainly not to prolong the time.

5261. Or to enter into competition beforehand?—No, not necessarily. Of course, I do not know what may happen at that time, but I should say the reasonable thing to happen would be this: that at a given date, which would give the Post Office sufficient time to supply a system of its own in the event of the negotiations falling through, the Post Office would approach the National Telephone Company and say, "What is your price for your plant?" It would ascertain by examination whether it was in a fair condition; and if the National Telephone Company were reasonable, the Post Office would pay a reasonable price, and in my opinion would be supported by public opinion in doing it. If, on the other hand, the National Telephone Company, feeling secure, and thinking the Post Office could not supply itself in any other way, held out for unreasonable terms, the Post Office would immediately proceed to supply itself with another system, and as soon as the licence expired would be able to bring it into operation.

*Chairman.*

5262. Or before?—Or before, if necessary.

5263. If the company was unreasonable?—Yes.

Sir *Charles Cameron.*

5264. That policy very considerably curtails the life of the Telephone Company in the event of a Postmaster, or of a Government, who might wish to acquire the telephone system, being in office?—It does not curtail it beyond the limit of the present licence now held by the company.

Sir *Charles Cameron*—continued.

Mr. *Tully.*

5265. I do not clearly understand this matter of the loss that the telephones have been to the telegraph service. Since you made your first statement here, there have been various explanations offered, and I should be obliged if you would make it clear how the telephone service affects the telegraph service?—Well, it is a very difficult matter to explain, and it is impossible to supply the honourable Member with exact figures; the accounts of the Post Office are not kept in such a way as to show what is due to each branch of the service in the way of expenditure. But what we are convinced of is this: that the telephone is more and more taking away the short-distance and direct traffic of the telegraphs, and leaving more and more to the telegraph service the long-distance and indirect telegraphing, which is the more expensive; therefore, what we are losing is the more profitable part of the business, and what we are getting by the increase that actually does take place is an increase in the less profitable part of our business; and we think that details such as were given in the report from the Postmaster of Liverpool, which I read to the Committee, support that view.

5266. The deficiency you stated up to the 31st March 1895 on the telegraph service was 140,000*l.*; how much of that would you say, roughly, is due to the competition of the telephone system?—I should like to be excused from saying that, because I really cannot tell.

5267. Would you say three-fourths, one-half, or one-fourth?—I am sorry I must say that I do not know; we know from the reports we have got from our practical officers that this easy part of our business is going away from us, and that the more difficult part of our business is slowly increasing.

5268. Supposing the telegraph service is losing very largely through the competition of the telephone system, do you think it would be good business for the Post Office to take over the telephone system?—Certainly.

5269. And you think that by stopping this loss, and taking over the telephone system, the revenue of the Post Office would resume its normal figures?—I think it might be made to do so; I think it would be more completely under control and treated then as one servcie.

5270. If this loss continued on the telegraph service, it would be really cheaper for the Post Office to take over the telephone system than to have this loss continuing and getting more and more in succeeding years?—Well, that depends on the price. If we could get it at a reasonable price, I should quite agree with the honourable Member.

5271. What would you say would be a reasonable price?—I think that is a matter that the honourable Member would have to leave to negotiation.

5272. You would not like to arrive at that basis by having competition, or a threat of competition, with the Telephone Company?—I think that would increase the difficulty and also the

Mr. *Tully*—continued.

the price, and it would do more than that; I think it would depreciate the business.

5273. It would depreciate the business of the Telephone Company?—Yes; and therefore the business which we should take over.

5274. Would not that be a means of arriving at a reasonable price?—I do not think so.

5275. So you cannot suggest what would be the best means of arriving at a reasonable price?—I should not like to do so in public; I should like to do that in personal negotiation.

5276. Then what you would say upon this will offer some guide in the matter?—I should not like to commit myself. I need not say to the honourable Member that I should try to get it for less than it was worth; and Mr. Forbes would hope to sell it for a good deal more than it was worth.

5277. We have got the idea that by competition you would get it at a reasonable price; you say the competition is not a thing that should be encouraged?—Yes, I feel that.

5278. If we have not then the remedy of competition, what remedy have we?—You have the possibility of competition, which is always a very strong thing, I think.

5279. That brings us back to the point from which we started?—No, I do not think so; I think there is a wide difference between competition and the possibility of it. I think we have proved by actual experience that the possibility of competition has produced certain good results, and, if it were necessary, that possibility, I think, would produce good results again.

5280. Yes, but we have so much evidence (the Post Office officials have given us so much evidence) to show that competition is a thing that should not be encouraged?—In the interest of the subscribers?

5281. In the interest of the public?—In the interest of the subscribers, it would certainly be inconvenient, and in the long run dear.

5282. And in the interest of the public, we have been told that competition is also a thing which is undesirable?—I think so, because it would lead to an enhancement in the price to be paid and to a depreciation of the business to be bought.

5283. Does not that come back to the same point, that there is really no remedy as against this company when competition ceases to be a

Mr. *Tully*—continued.

remedy?—I am afraid I cannot give any other answer than I have given.

5284. I think it was stated by Mr. Forbes, that the people who use the telephone system can have a hundred words at the rate of a half-penny per hundred words?—I think that was stated; I do not remember.

5285. And 100 words on the telegraph system would be 4*s.* 2*d.*?—Yes, it would be much dearer.

5286. If the telephone system became more developed, would not the rate of carrying messages for the public be a great deal cheaper?—That is by telephone, you mean?

5287. Yes?—The more the telephone is developed, the more a cheap instrument is placed at the disposal of the public, no doubt.

5288. In the case of press messages, for instance, would there be an advantage that the telephone should be developed more than it is?—I think for urgent press messages, in regard to which it was desired to secure great speed, the telephone would afford a means of meeting that demand of the press; but I doubt whether the telephone would provide such a service as the press now enjoy, under which a message is transmitted to hundreds of subscribers throughout the country, at what is practically little more than 2*d.* per 100 words, or 75 words, as the case may be; because, of course, that telephoning to which the honourable Member now refers would not be the mere telephoning through an exchange, but it would be the telephoning over trunk wires, and in that case, Mr. Forbes's estimate of the low price would not apply.

5289. If this telephone company manage to give a good service, and a cheap service, do not you think they will capture a great deal more of your telegraph business?—I think they will.

5290. And the continuous loss to the Post Office will increase every year, will it not?—That is so, and that is the reason why it is proposed to enter into this agreement, under which the Post Office is to do all the trunk wire business.

5291. Do not you think it would be accordingly more prudent that the Post Office should proceed as soon as practicable to take over the whole business?—That is not a question for me to answer, I think.

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# APPENDIX.

## APPENDIX, No. 1.

PAPER handed in by Mr. *W. H. Preece*, C.B., F.R.S., 3 May 1895.

### THE TELEPHONE SERVICE IN

| COUNTRY. (1.) | Whether in Hands of Public Bodies or Private Companies. (2.) | System. (Single or Double Wires.) (3.) | Area. (4.) | Number of Subscribers. (5.) |
|---|---|---|---|---|
| AUSTRIA | In the hands of the State. (The purchase of the system in Vienna was completed in January last.) | Single wire. (If a double wire is erected for use in connection with trunk wires, the contribution towards cost of construction is increased by one-half.) | Not known | Vienna, about 8,500 |
| BELGIUM | All exchange systems (with the exception of those in three unimportant places) are in the hands of the State. The three in question will shortly be acquired. | Some wholly double and some wholly single. For converting a single wire into a metallic circuit the single wire rate is increased 50 per cent., but the additional charge must not exceed 4*l.* a year. | Not known | Brussels, more than 2,000<br>Antwerp, more than 1,500 |
| FRANCE | In the hands of the State since September 1889. | Double | Not known | Paris, more than 14,000 |
| GERMANY | Always in the hands of the State. | Single | Not known. (But it is known that in the case of adjoining towns, such as Hamburg and Altona, the subscribers in the one place have to pay an additional subscription of 7*l.* 10*s.* a year if they wish to speak to those in the other.) | Berlin, about 23,000<br>Dresden, about 3,000<br>Frankfort, about 3,000<br>Hamburg, about 9,000 |
| HUNGARY | With the exception of seven small exchanges in the hands of private individuals, the whole system is owned by the State. | Both single and double | Not known | Buda-Pest, about 2,800 |

## APPENDIX, No. 1.

PAPER handed in by Mr. *W. H. Preece*, C.B., F.R.S., 3 May 1895.

## CERTAIN FOREIGN COUNTRIES.

| Terms of Subscription. (Per Annum.) (6.) | | | | Statistics of Capital and Profit. (7.) | Trunk-wire Charges. (8.) |
|---|---|---|---|---|---|
| — | Less than 3 Kilometres. | 3 Kilometres (not quite 2 Miles). | 5 Kilometres (about 3 Miles). | Not known | Up to 50 kilometres (31 miles), 30 kreutzers (6*d.*).<br>From 50 to 100 kilometres (62 miles), 50 kreutzers (10*d.*).<br>From 100 to 150 kilometres (93 miles), 80 kreutzers (1*s.* 4*d.*).<br>Over 150 kilometres (93 miles), 1 gulden (1*s.* 8*d.*).<br>Between Vienna and Trieste, 1 gulden 50 kreutzer (2*s.* 6*d.*).<br>A triple charge is levied for urgent conversations. |
| | £. | £. | £. | | |
| Vienna - | 8 | 10 | 14 | | |
| Other places, annual subscription of 4*l.*, with contribution towards cost of construction. | | | | | |
| — | | Radius of 3 Kilometres (not quite 2 Miles). | Radius of 5 Kilometres (about 3 Miles). | Not known | 1 franc (10*d.*), to any part of the country. |
| | | £. | £. *s.* | | |
| Brussels and Antwerp - | | 10 | 14 – | | |
| Louvain - - - | | 5 | 7 10 | | |
| Underground Lines : | | | £. | Not known | 50 centimes (5*d.*) per 100 kilometres (62 miles). |
| In Paris - - - - - | | | 16 | | |
| In the Provinces - - - | | | 12 | | |
| Aerial lines, 8*l.* Subscribers using aerial lines also pay a contribution towards cost of first establishment. In all cases the subscribers provide telephones at their own cost. (The Commission on the Budget of 1895 has reported against any reductions in the charge for the present.) | | | | | |
| Within 5 kilometres (about 3 miles), 7*l.* 10*s.* On the 11th ultimo, in a debate in the Imperial German Parliament on the estimates for 1895–96, the Postmaster General declared that it was impossible at present to reduce this rate. | | | | Not known | Up to 30 kilometres (20 miles), 50 pfennigs (6*d.*).<br>Beyond 30 kilometres (20 miles), 1 mark (1*s.*).<br>A triple charge is levied for urgent conversations. |
| | | | £. | | |
| Buda-Pest - - - - - | | | 12 | Not known | 1 florin (1*s.* 8*d.*). |
| Other places - - - - - | | | 5 | | 3 florins (5*s.*) for an urgent conversation. |

THE TELEPHONE SERVICE IN

| COUNTRY. (1.) | Whether in Hands of Public Bodies or Private Companies. (2.) | System. (Single or Double Wires.) (3.) | Area. (4.) | Number of Subscribers. (5.) |
|---|---|---|---|---|
| ITALY | Private Companies | Single | Not known | Rome, about 1,800 one company.<br>Rome, about 600 the other company.<br>Milan, about 1,200 |
| NORWAY | Mainly private companies. A Committee appointed by the Government has recently reported in favour of State acquisition. | There are only a few double wires. | Not known | Up to 1885 there were two companies in Christiania, the International Bell Company, and the Société des Téléphones. The former had 995, and the latter 634 subscribers, while 230 belonged to both systems. Owing to the inconvenience of competition, the Municipality induced the two companies to amalgamate, and in 1892 the number of subscribers to the joint system was 3,287. |
| SWEDEN | Except within the district around Stockholm, the telephone system is wholly in the hands of the State; and even in that district the State has a competitive system. | Both. (In the Stockholm system the wires are double). | Stockholm. The company's system has a radius of 70 kilometres (43 miles.) The Director General of Telegraphs, Sweden, recently stated that he considered the large area at Stockholm unsatisfactory. | Stockholm (within radius of 70 kilometres):<br>Company, about 11,000<br>State 3,500<br>14,500 |
| SWITZERLAND | The State | Single, except in a few cases. | Not known | Geneva, about 2,500<br>Berne, about 1,000<br>Basel, about 2,000 |
| UNITED STATES | Private Companies | Both | Not known | Boston 6,488<br>Chicago 10,848<br>New York 10,396<br>Philadelphia 4,153<br>San Francisco 5,061<br>Washington 1,845 |

This Return has been prepared from the information in the hands of the Department. Part of the information was obtained some time ago, and the Return must, therefore, be regarded as subject to correction.

General Post Office, London,
April 1895.

CERTAIN FOREIGN COUNTRIES—*continued.*

| Terms of Subscription. (Per Annum.) (6.) | Statistics of Capital and Profit. (7.) | Trunk-wire Charges. (8.) |
|---|---|---|
| Rome, larger system, 6*l.* 14*s.* for 3 kilometres, and 9*l.* for 5 kilometres.<br>Smaller system, 5*l.* 10*s.* | Not known. | — |
| Christiania: Previous to amalgamation, Société des Téléphones, 2*l.* 4*s.*, subscriber paying for telephones and construction of line. International Bell Company, 2*l.* 15*s.* Amalgamated Company, 4*l.* 8*s.*, within 1½ kilometres of central station. Beyond that distance a higher charge is made. (The Committee referred to in Column 2 of this Return, has recommended that the rate of subscription for Christiania should be fixed at 5*l.* 10*s.*). | In 1893 the British Consul General reported that the Capital of the Christiania Telephone Company was about 83,333*l.*, and that a dividend at the rate of 5 per cent. was paid. (*See* Report No. 290 of 1893 on Telephone Systems of Norway and Sweden). | Between Christiania and its suburbs, 20 to 30 centimes (2*d.* to 3*d.*).<br>Between Christiania and Gjoewik, 30 centimes (3*d.*).<br>Between Christiania and Drammen, Moss, Droebak, Holnefoss, 62½ centimes (6½*d.*). |
| Stockholm (within radius of 4½ kilometres):<br>Company, 4*l.* 8*s.* to 5*l.* 10*s.*<br>State, 4*l.* 8*s.*<br>With contribution towards cost of construction in both cases. | Not known - - - | Up to 100 kilometres (62 miles), 18¾ centimes (2*d.*).<br>Up to 250 kilometres (155 miles), 37½ centimes (4*d.*).<br>Up to 600 kilometres (372 miles), 62½ centimes (6½*d.*).<br>Up to 900 kilometres (559 miles) (10*d.*).<br>Beyond 900 kilometres, 1 franc 25 centimes (1*s.* 0½*d.*). |
| The charge within a radius of 2 kilometres (1·2 miles) is 120 francs (4*l.* 16*s.*) for the first year, 100 francs (4*l.*) for the second year, and 80 francs (3*l.* 4*s.*) for the following years. For every additional 100 metres (328 feet) a charge of 3 francs (2*s.* 6*d.*) is made. For every 100 conversations (or part of 100) in excess of 800, a further charge of 5 francs (4*s.* 2*d.*) is made. | Not known - - - | Up to 50 kilometres (31 miles), 30 centimes (3*d.*).<br>From 50 to 100 kilometres (62 miles), 50 centimes (5*d.*).<br>Over 100 kilometres (62 miles), 75 centimes (7½*d.*). |
| | Not known - - - | Between New York and Chicago, 9 dollars (1*l.* 17*s.* 6*d.*). |

| | Business. | | Residence. | |
|---|---|---|---|---|
| | Double Wire. | Single Wire. | Double Wire. | Single Wire. |
| | £. | £. | £. | £. |
| Boston - - | 33 | 25 | 28 | 20 |
| Chicago - | 36 | 26 | 26 | 21 |
| New York - | 50 | 31 | 37 | 21 |
| Philadelphia | 33 | 25 | 27 | 21 |
| San Francisco | 19 | 12 | 19 | 12 |
| Washington - | 33 | 21 | 33 | 15 |

## APPENDIX, No. 2.

PAPER handed in by Mr. *W. H. Preece*, F.R.S., 7 May 1895.

## CITY POPULATION COMPARED WITH CITY SUBSCRIBERS.

COMPARATIVE STATEMENT, 1 January 1895.

| | Population. | Subscribers in Exchange. | Average Number of Inhabitants to each Subscriber. |
|---|---|---|---|
| New York | 1,515,301 | 10,396 | 145·7 |
| Chicago | 1,099,850 | 10,848 | 101·3 |
| Philadelphia | 1,046,964 | 4,153 | 252·1 |
| Brooklyn | 806,343 | 4,652 | 173·3 |
| St. Louis | 451,770 | 3,972 | 113·7 |
| Boston | 448,477 | * 6,488 | 69·1 |
| Baltimore | 434,439 | 2,550 | 170·4 |
| Cincinnati and Covington | 334,279 | 4,095 | 81·6 |
| San Francisco | 298,997 | 5,061 | 59·0 |
| Cleveland | 261,353 | 3,453 | 75·6 |
| Buffalo | 255,664 | 2,652 | 96·4 |
| New Orleans | 242,039 | 1,620 | 149·4 |
| Pittsburgh | 238,617 | 3,487 | 68·4 |
| Washington | 230,392 | 1,845 | 120·7 |
| Detroit | 205,876 | 4,277 | 48·1 |
| Milwaukee | 204,468 | 2,457 | 83·2 |
| Newark | 181,830 | 1,161 | 156·6 |
| Minneapolis | 164,738 | 2,148 | 76·6 |
| Jersey City | 163,003 | 758 | 215·0 |
| Louisville | 161,129 | 2,497 | 64·5 |
| Kansas City | 157,984 | 2,702 | 58·4 |
| Omaha | 140,452 | 1,775 | 79·1 |
| St. Paul, Branch of Minneapolis | 133,156 | 1,505 | 88·4 |
| Providence | 132,146 | 2,979 | 44·3 |

* Does not include express subscribers; with those there are 64 inhabitants to each subscriber in Boston.

## APPENDIX, No. 3.

PAPER handed in by Mr. *Lamb*, 28 May 1895.

STATEMENT showing the Number of TELEGRAMS passing within the proposed Liverpool Telephone Area during a Week in April.

| YEAR. | Telegrams passing between Offices in | | | TOTALS. |
|---|---|---|---|---|
| | Liverpool District (including Liverpool Head, District, Branch, and Sub-offices). | Liverpool District and Birkenhead District. | Birkenhead District (including Birkenhead Head, Branch, and Sub-offices). | |
| 1885 | 941 | *449 | † | 1,390 |
| 1886 | 2,129 | 761 | 99 | 2,989 |
| 1887 | 2,681 | 1,149 | 179 | 4,009 |
| 1888 | 2,858 | 1,255 | 170 | 4,283 |
| 1889 | 3,505 | 1,621 | 232 | 4,358 |
| 1890 | 3,767 | 1,663 | 239 | 5,669 |
| 1891 | 3,876 | 1,780 | 295 | 5,951 |
| 1892 | 4,008 | 1,736 | 240 | 5,984 |
| 1893 | 3,553 | 1,722 | 272 | 5,547 |
| 1894 | 3,567 | 1,728 | 271 | 5,566 |
| 1895 ‡ | 3,326 | 1,441 | 237 | 5,004 |

* June; no figures for April. † No figures for 1885. ‡ March.

## EFFECT OF TELEPHONE ON TELEGRAPH.

### LIVERPOOL.

EXTRACT from Report of Postmaster as to Effect of Telephone Competition on Inter-town Telegraph Business.

Since December 1890 a return has been kept for one week in each of the months of March, June, September, and December, the object of which has been to ascertain the amount of traffic from Liverpool to London, Manchester, Birmingham, and Leeds, and *vice versâ*, telegrams signalled to these towns for "onward" transmission not being included. The result is as follows:—

| One Week in March. | Number of Telegrams. | | | |
|---|---|---|---|---|
| | London. | Manchester. | Leeds. | Birmingham. |
| 1891 | 29,476 | 5,122 | 795 | 1,633 |
| 1892 | 25,555 | 4,387 | *843 | 1,487 |
| 1893 | 24,302 | *4,586 | 813 | 1,455 |
| 1894 | 23,217 | 4,286 | 778 | 1,348 |
| 1895 | *23,728 | 3,842 | 684 | 1,299 |

It will be seen that, except in the few cases marked *, the whole return shows a continuous decrease, the percentages of the reduction between March 1891 and March 1895 being:—

| | London. | Manchester. | Leeds. | Birmingham. |
|---|---|---|---|---|
| Percentage of decrease in four years | 19 | 25 | 14 | 20 |

The general conclusion is, I think, indisputable, that the competition of the telephones has produced a decrease in the number of telegrams, where heretofore I had been accustomed to look for a regular and steady increase, although to some extent the depression in trade may have interfered with the continuous development.

In the case of Belfast, where the telephones have not been competing, there has been an increase of 23 per cent. In the case of other towns in which telephones have for some time been in full working, the decrease generally has been 20 per cent.

INFLUENCE ON TELEGRAPHS IN NORWAY.

| | Number of Telegrams. | | | | | Telephone Line established. | Decrease in 1892, as compared with Year previous to establishment of Telephone Line. |
|---|---|---|---|---|---|---|---|
| | 1888. | 1889. | 1890. | 1891. | 1892. | | |
| From Christiania to Moss | 3,376 | 3,875 | 2,116 | 1,944 | 1,847 | 10 Dec. 1889 | 2,028 |
| To Christiania from Moss | 3,316 | 4,139 | 2,122 | 2,106 | 1,968 | | 2,171 |
| Total | 6,692 | 8,014 | 4,238 | 4,050 | 3,815 | | 4,199 |
| From Christiania to Gjovik | 991 | 1,032 | 782 | 737 | 835 | 1 Jan. 1890 | 197 |
| To Christiania from Gjovik | 1,139 | 1,292 | 937 | 875 | 1,133 | | 159 |
| Total | 2,130 | 2,324 | 1,719 | 1,612 | 1,968 | | 356 |
| From Christiania to Drobak | 1,518 | 1,957 | 1,478 | 1,011 | 779 | 1 May 1890 | 1,178 |
| To Christiania from Drobak | 1,878 | 2,297 | 1,700 | 1,134 | 1,044 | | 1,253 |
| Total | 3,396 | 4,254 | 3,178 | 2,145 | 1,823 | | 2,431 |
| From Moss to Drobak | 98 | 153 | 135 | 81 | 80 | 1 May 1890 | 73 |
| To Moss from Drobak | 113 | 191 | 117 | 89 | 61 | | 130 |
| Total | 211 | 344 | 252 | 170 | 141 | | 203 |
| From Christiania to Drammen | 8,998 | 10,395 | 10,963 | 10,762 | 6,361 | 21 Oct. 1891 | 4,602 |
| To Christiania from Drammen | 5,874 | 7,329 | 7,514 | 7,049 | 3,178 | | 4,336 |
| Total | 14,872 | 17,724 | 18,477 | 17,811 | 9,539 | | 8,938 |
| From Moss to Drammen | 461 | 648 | 764 | 765 | 394 | 21 Oct. 1891 | 370 |
| To Moss from Drammen | 302 | 363 | 470 | 547 | 282 | | 188 |
| Total | 763 | 1,011 | 1,234 | 1,312 | 676 | | 558 |

## APPENDIX, No. 4.

PAPER handed in by Mr. *W. H. Dickinson*, 26 April 1895.

## LONDON COUNTY COUNCIL.

SUMMARY of the Engineer's Report to the Highways Committee on Cost of Telephone Service for London (1895).

THE question of establishing an independent municipal telephone service in London has been under consideration for some time, and estimates have been prepared of the capital cost of establishing a system, and also of the annual expenditure necessary to maintain and work it.

The actual capital expenditure which it is estimated will have to be incurred by the Council in providing the necessary equipments for 10,000 subscribers, including exchanges and their fittings, wiring and instruments, and junction wires between the exchanges, is about 360,000*l*., or to allow for special contingencies, this has been taken at 400,000*l*.

This estimate is for overhead communication, excepting the junction wires between the exchanges, which would be laid underground, and also certain portions of the main routes, where the lines for a large number of the subscribers could be carried together for some distance, which would also be laid underground.

A complete metallic circuit, and instruments of the most approved description, have been estimated for.

It has been assumed that with a number of exchanges, varying between 12 and 20 (the exact number cannot be fixed until the details of the scheme are laid down, and the actual route selected), the largest exchanges being fitted for from 2,000 to 3,000 subscribers, the smallest probably for about 100, the exchanges would provide for a total number of subscribers in excess of the 10,000 alluded to, as it is assumed that with a cheapened and improved service the number would considerably increase.

The Council would probably use for the purpose of exchanges some of its fire brigade stations, several of which are conveniently situated, and this would have the result of reducing the cost of establishing the work as well as of assisting the communication of information as to fires to the various fire brigade stations.

The average distance of each subscriber from an exchange has been assumed for the purpose of this estimate at half a mile. This is a good deal more than sufficient for the central portion of the area, but in the outlying districts the average distance might be somewhat greater, although there the cost of the work would probably be somewhat less.

The cost of working and maintenance has been estimated at a sum not exceeding 90,000*l*. per annum, including a very liberal amount for contingencies, and this estimate provides for a very much higher rate of wages for the operators and clerks employed than that which it is believed is now paid by the Telephone Company.

It also includes interest on and redemption of capital. The capital outlay would, as is usual in such cases, be provided by raising money by loan for a term of 25 years, and the annual expenditure of 90,000*l*. includes 23,000*l*. under this head.

It would be possible to carry the lines underground to a greater extent than has been estimated for, but this, of course, would be at an increase of first cost, although no doubt reducing the cost of maintenance.

If the rate of maintenance of wires inserted in the agreement between the Post Office and the Telephone Company of 30*s*. per mile for overhead wires be taken, the annual expenditure would be reduced by about 5,000*l*.

The estimated wayleaves rental is somewhat uncertain. It is taken at 10*s*. per subscriber per annum, but it must be borne in mind that each subscriber provides one support for wires free of charge, for it would be a condition of supply, as it is with the Telephone Company, that each subscriber should do so, and this gives a very large number of supports free of rental.

Fifteen per centum has been added for supervision and establishment charges, including rent and insurance. This is probably amply sufficient, and a further 15 per cent. on the total has been added to cover contingencies.

The Post Office royalty has not been included, except so far as it may be covered by the contingencies. If this be insufficient to meet it and other charges, it will, of course, have to be added to the rent charged to subscribers, but it will be seen from the details that a general rental of 10*l*. should be quite sufficient to leave a balance on the right side.

The practice of the Telephone Company of charging a higher rate for lines more than a mile in length, *i.e.*, subscribers more than a mile distant from an exchange, would probably be adopted.

In estimating the length of subscribers' lines it must not be forgotten that in the City and other central parts many subscribers are practically under one roof, and this largely reduces the length of out-door lines, and enables a large number of lines to be run at the same time, thus reducing the cost.

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*Note.*—It should be stated that the following estimates have been taken out at very full figures, the intention being not to show the lowest amount for which the work can be done, but to give a safe figure to cover all possible contingencies. Full prices have been put down for each item, and in addition to this, it will be seen there is a large allowance for contingencies, which would probably not be required, and in both estimates the rates of wages have been taken at a figure much above that paid by the Telephone Company; indeed, in the maintenance estimate operators' wages have been estimated at rates from 50 per cent. to 100 per cent. above those believed to be paid by the Telephone Company. There is practically no doubt that the work could be done at rates which would allow of an all round charge of 8*l*. per annum to each subscriber.

The City is supposed to be included.

## Capital Estimate per Subscriber.

(Average Distance from Exchange, Half a Mile.)

| | £. |
|---|---|
| Wire, cable, poles, &c., and fixing | 16 |
| Subscriber's instrument, house wires, and fixing | 5 |
| Proportion of exchange trunks, say | 5 |
| | 26 |
| Contingencies, say | 4 |
| | 30 |
| Exchanges complete, including contingencies, say | 6 |
| Total Expenditure per Subscriber | £ 36 |

or, for 10,000 subscribers, 10,000 × 36 = 360,000*l.*, say 400,000*l.*

## Maintenance Estimate.

10,000 Subscribers (8 +), say 14 Exchanges.

| | £. | £. |
|---|---|---|
| Interest on and redemption of capital | | 23,000 |
| Maintenance of subscribers' wires, at 2*l.* per mile = 2*l.* per subscriber per annum | 20,000 | |
| Maintenance of instruments and exchange trunks | 4,000 | |
| Operators, at 25*s.* per subscriber per annum | 12,500 | |
| Clerks in charge and assistants | 3,000 | |
| Say | | 40,000 |
| Wayleave rentals, at 10*s.* per subscriber per annum | | 5,000 |
| | | 68,000 |
| Supervision and establishment charges, rent, and insurance, say 15 per cent., say | | 10,000 |
| | | 78,000 |
| Contingencies, 15 per cent., say | | 12,000 |
| | | £ 90,000 |

*Alexander R. Binnie*,
Chief Engineer.

## APPENDIX, No. 5.

### PAPER handed in by Mr. *W. H. Dickinson*, 26 April 1895.

**REPORT on and ESTIMATE for supplying the Administrative County of London with a complete Telephonic System for 10,000 Subscribers.**

**ESTIMATE for supplying London with a complete Telephonic System for 10,000 Subscribers.**

110, Cannon-street, London, E.C., 2 April 1895.

HAVING very carefully gone into the whole question of establishing a Telephonic Exchange system throughout the Administrative County of London, I beg herewith to present my Report.

It is almost unnecessary to state that my Estimate is for a metallic circuit system, and I may mention that the Instruments for which I have quoted are of the latest and best pattern.

The first thing to be decided is whether the wire should be overhead or underground.

There is, I take it, no question but that it would be a physical impossibility to erect an overhead system of bare wires similar to the greater portion of The National Telephone Company's system, that company's wires forming such a net-work in places as almost to prevent a single wire being run, and quite to prevent the running of spans consisting of a large number of wires.

Undoubtedly, from the point of efficiency, a system entirely underground would be the best for many reasons, and although this would entail an expenditure not to be lightly entertained, I do think that in undertaking the wiring of such a City as London, it would in the long run be undoubtedly the best policy to adopt; I am also of the opinion that had the National Telephone Company put their wires underground originally, they would have been money in pocket at the present time, and what is more important from the public point of view, they would have been in possession of a service, to a very large extent, free from the many "faults" which have not only caused the dissatisfaction prevailing with the existing service, but prevented the Telephone being as universally used as one might expect in such a City as London.

I have not attempted here to arrive at the cost of a system entirely underground, but understanding that the Council would, in the event of their obtaining a licence, adopt an aerial system, I have estimated that the bulk of the wires would be run in overhead cables; while, at the same time, estimating for putting all the main junction wire routes underground.

Taking it for granted that at the ordinary tariff rate, the exchange wires would not exceed one mile in length, it would be found that the average length per subscriber would be not much more than 400 or 500 yards, but, to be on the safe side, I have taken the average lengths all through to be half a mile.

To estimate for such a large system, covering so large an area as the County of London, is a very difficult matter, as the knowledge of the position of subscribers and exchanges would alone enable a close estimate to be made, but after looking at the positions of the subscribers to the existing system, I have estimated that about 15 exchanges would be necessary.

I am aware that for a larger number of subscribers than now exist, this is a smaller number of exchanges, but I would point out that the policy, and rightly I think, of the National Company, is to work with as few exchanges as possible, without unreasonably increasing the length of subscribers' wires.

In support of this statement, I may mention that into their new exchange in Lime-street, in which there are now working about 23,000 subscribers, have been diverted, the subscribers originally working into the following exchanges: Cornhill, Leadenhall-street, Mincing-lane, and East India Avenue.

A new exchange is now in course of construction in Queen Victoria-street, which is to take subscribers now working into the existing Queen Victoria-street Exchange, and also those at Coleman-street Exchange.

Another is being constructed in Holborn Circus, to accommodate the subscribers now working into the Chancery-lane and Smithfield Exchanges.

I reckon that the proposed exchanges should give accommodation for the following number of subscribers:—

| | | |
|---|---|---|
| 2 | for | 3,000 each. |
| 1 | „ | 1,000. |
| 4 | „ | 600 each. |
| 4 | „ | 100 each. |
| 4 | „ | 50 each. |

It would probably be found, on the completion of canvassing, that this arrangement might be subject to variation, but inasmuch as all figures must necessarily be hypothetical, it will, I think, form a good working basis, and even if it were necessary to divide up the 10,000 subscribers in a different way, it would not make much difference in the cost.

As it is not at all likely that a start would be made with as many as 10,000 subscribers, I have for the present, reckoned the principal exchanges as accommodating 2,000 subscribers, and I have estimated that for that number it would be necessary to branch out from the exchange in 40 different directions, with 50 pair cables; this, for such an exchange, would mean 20 miles of cable pole route, and taking into consideration the number of subscribers which could be reached by single spans from the exchange, this would allow for branching off from these 40 main routes where necessary.

I have estimated that 660 yards, or three-eighths of a mile, per subscriber, might be run in cable, and 220 yards in open wire.

The aerial cables would be of the type now manufactured specially for metallic circuit telephone work; the bare wires would be hard-drawn copper of high conductivity or silicium bronze.

The underground cables for the junction wires would be those specially made for such work, lead covered and dry core.

The switch-boards would be of the latest multiple pattern, and similar to that recently erected by the National Telephone Company, at their new exchange in Lime-street, which, I think, it is safe to state, is the most perfect switch-board in existence.

On the accompanying sheets I have, for the guidance of the Council, shown how I have arrived at the various items composing my estimate, and I may add that where the figures are for apparatus they are from estimates purposely obtained, and thoroughly reliable; and the estimates for labour are based on experience now covering a considerable number of years.

It may, perhaps, be thought that my estimate for procuring wayleaves (500*l.*) is too low, but I am convinced that the National Telephone Company do not secure theirs in the most economical way, and I may further state that they often pay extravagant rentals for them; independently, however, altogether of this, I take it that the Council in the event of their obtaining a license, would secure compulsory powers.

In conclusion, I give a summary of my figures, the particulars of which will be found on the accompanying sheets :—

SUMMARY.

| | £. |
|---|---|
| Material for subscribers' wires | 126,875 |
| Switch-boards, including test-boards and fitting up | 42,308 |
| Material for junction wires | 34,475 |
| Labour on erection of subscribers' wires | 26,774 |
| Labour on junction wires | 44,163 |
| Outfits of tools for say 20 gangs | 800 |
| For alterations and additions to exchange premises | 10,000 |
| | £. 285,395 |
| Add 25 per cent. for supervision and contingencies | 71,348 |
| Total | £. 356,743 |

I will now give the particulars of the annual expenditure, which I estimate at 75,898*l.*

| | £. |
|---|---|
| Sinking fund and interest | 19,675 |
| Wages of exchange operators | 16,713 |
| Wayleave rentals | 5,000 |
| Maintenance | 15,000 |
| Rent of offices, &c. | 1,000 |
| | £. 57,388 |
| Add 15 per cent. supervision | 8,610 |
| | £. 65,998 |
| Add 15 per cent. for contingencies | 9,900 |
| Total annual expenditure | £. 75,898 |

According to the above figures, London could be supplied at a rental of 10*l.* per subscriber, giving a gross revenue of 100,000*l.*, and after deducting Post Office royalty would leave a net revenue of 90,000*l.*

(signed) *Jno. L. Newland.*

To the Engineer, London County Council,
42, Cranbourne-street, W.C.

## APPENDIX, No. 6.

PAPER handed in by Sir *Edward Carbutt*, Bart., 26 April 1895.

### THE LONDON CHAMBER OF COMMERCE, INCORPORATED.

Botolph House, Eastcheap, London, E.C.,
22 April 1895.

### TELEPHONE SERVICE.

RESOLUTIONS ADOPTED.

1. *Acquisition of Telephones by the Government.*—"That this Chamber, whilst favouring private enterprise, is of opinion that if greater development of the telephone service, which the commercial community demands, can be better secured by the State acquiring and working the whole system of telephones, then this Chamber would approve the adoption of such a course."

2. *Validity of Telephone Agreement.*—"That the late Chancellor of the Exchequer and the present Chancellor of the Exchequer having, in their places in Parliament, stated that the agreement between Her Majesty's Post Office and the National Telephone Company was a binding agreement, it would be useless and a waste of time on the part of this Committee re-opening the question at present."

3. *Competing Systems.*—"That properly controlled competition should be encouraged, providing that inter-communication between different systems covering the same area can be satisfactorily arranged, and subject to the Post Office authorities deciding, after due and adequate inquiry, that the public can be better and more economically served than by the existing arrangements."

4. *Standard Regulations.*—"That in the opinion of this Chamber it is desirable that standard regulations should be drawn up by a Government Department for the guidance of local authorities in determining the conditions to be imposed by them as a preliminary to their consent being given to telephone companies obtaining statutory powers."

5. *Varying Rates for Limited Services.*—"That the desirability of developing the principle of varying rates for limited services should be emphasized by the evidence before the Select Committee."

6. *Unprofitable Areas.*—"That in granting licenses, precaution should be taken to avoid the neglect of telephone service in relatively unprofitable areas."

7. *Trunk Line Tariffs.*—"That it is desirable evidence should be submitted to the Select Committee comparing the proposed Post Office trunk line tariffs with those of other countries, and as to the excessive rates proposed to be charged for trunk lines in the United Kingdom, as set forth in the Treasury Minute of May 1892."

## APPENDIX, No. 7.

PAPER handed in by Major General *C. E. Webber*, C.B., R.E., 14 May 1895.

## THE DEVELOPMENT OF THE TELEPHONE.

The following is a reprint of two letters to the "Times," which appeared in 1892:—

From the late Duke of *Marlborough*, dated 20th August 1892.

To the Editor of the "Times."

Sir,

You have on several occasions done me the favour of inserting letters on the question of the development of the telephone in this country, and I venture to make one more appeal for space in your columns for a few further remarks on this subject.

There seems to be a misconception in certain quarters of the Press that the arrangements which have been come to between the two great telephone companies, as the result of their mutual agreement, are not likely to bear any immediate useful fruits in the public interest. It will not be long before the misconception is cleared up by the efforts which these companies are about to make to introduce, not only in this metropolis, but also in all the other large towns of England, a system of telephony more perfect even than any which exists in other European countries. The public have been led to suppose that the competition of these two companies among themselves might have produced this result in a more satisfactory manner, since competition must have led to rate-cutting between these two rivals in this industry. A little consideration of the matter would, however, show that, though a lower scale of charge might have been produced by competition, the eventual cost to the public and also to the shareholders would have been considerably greater. I need not instance the disastrous effects of rate-cutting and competition generally, as they must be very well known. We have some notorious instances of the waste of capital and the cost to shareholders of rate-cutting enterprises in the matter of American railways, and with regard to the telephone the consequences would have been even more disastrous. The establishment of two completely independent rival systems of telephony, say, in the metropolis, would mean that when the amalgamation eventually took place on the surrender of one of the rivals the victor would become possessed of a system which would be no earthly use to amalgamate electrically with the other. The whole system would thus be crystallised into a bad system of distribution which could not be altered, and the public would therefore be, electrically speaking, inefficiently served.

As to the cost to shareholders of a competition, that speaks for itself; and as to subscribers, though they might appear to have the advantage of lower rates, they would have great inefficiency, and they would also be compelled to pay two telephone subscriptions instead of one, and have two sets of instruments in their business premises or homes. All this will now be avoided by the working arrangement that has been come to between the two telephone companies. The area of England is so large that the demand for capital expenditure will be so great that the apportionment out of areas should present no insuperable difficulty to the respective companies. As to commercial arrangements, there is no reason to see that these should present any insuperable obstacle to a harmonious scheme of development, considering the fact that both companies are in harmony with the General Post Office, and are willing and ready to assist in the development of the great trunk system and inter-trunk connection throughout the country which the Government is commencing. It is not at all improbable that the demand for the use of the telephone throughout this country will increase to an extent little anticipated, and that, in the course of a very few years, instead of 40,000 subscribers, as there are at present, the number will reach nearer 200,000, owing to the demand which will be created to speak over the Government trunk systems. We have as yet had no experience of the use of the telephone in England, but, with the knowledge which is at present possessed by electricians in this country and abroad, the two companies are now in a position, acting together on a settled plan, to establish systems of distribution on the twin-wire principle throughout the large towns of England which will practically result in the establishment of a new industry. By the Act which was passed last Session, the Government taking all the receipts on these trunk lines, the profits of distribution alone are left to the companies. The organisation, however, which it represents to carry out this work efficiently is enormous, and would require the creation of a new public department if the country were to ever undertake the working of the system itself.

As to the matter of rates, this question produces some difficulty to determine at present, owing to the Government having established a system of telephone areas which will necessitate sound consideration on the part of the companies before establishing their new scale of charge. The first requirement to be met is undoubtedly efficiency. This applies not only to private service to subscribers' houses, but also with regard to the connections which are now to be made with the post offices throughout the country, and the establishment of call offices, which should be located in every town in all convenient situations. In the matter of price it must be remembered that there will be great disadvantage in having the rate so low that the demand would become larger than it would be possible to meet conveniently from an electrical point of view. If every householder throughout the country possessed a telephone, the amount of unnecessary talking which would take place is somewhat inconceivable, and in some ways it is better that the price should be one which should have some relation to the purposes of the user. For the general convenience of the public, call offices should be largely multiplied, so that no one should be deprived from the use of the telephone from the charge being too high for a private instrument.

I observe in your to-day's issue the publication of the statistics of the telephone companies in the United States, from which it appears that the number of subscribers has grown between 1880 and 1890 from 48,414 to 227,357, and that the net earnings in the year 1890 from this industry represents 5,260,712 dollars on a capital expenditure of 14,605,787 dollars. With regard to Sweden, which is probably the European country which has developed the telephone business more completely than any other, the system of Government trunks and local exchanges has arrived at a wonderful state of development. From what I have seen of the working of the telephone in that country the facility with which persons in one town converse with those in another is quite remarkable. The subscriber calls up the Stockholm exchange, say, and requests to have a conversation arranged with either Malmö or Gottenburg. The trunk operators communicate together by comparing the lists of persons who have appointments, and the operator at Stockholm telephones back to the subscriber the hour at which the conversation required has been negotiated. In the busy time of the day it may take some two or three hours before the conversation can take place; at other times half an hour is sufficient, and even less. It is easy, therefore, to see, when this system is properly applied in England by the action which will now be taken up by the General Post Office in laying inter-trunk wires all over the country and by the action of the telephone companies establishing an efficient distribution in all telephone areas, that the development which has taken place in America can be easily equalled by that which must come about in this country in a remarkably short time. England is an ideal country for the development of the telephone. It is inhabited by 36,000,000 of people, all living in a small area, and there is no town so distantly situated from another that they cannot be put into telephonic communication. The companies have thoroughly realised the situation, both from the point of view of the public demand and from the point of view of electrical knowledge, and it is certain that a new era is about to commence in this important industry which will largely change business relations throughout the country. To be able to hold a conversation of a thoroughly audible character between Glasgow and London may save several letters, telegrams, and also a railway journey. The price at which this boon has to be paid for is no measure of the value to the business man in time and labour. In large cities, such as London, the saving of time and expense in journeys in cabs,

cabs, in making appointments for interviews, and the sending of letters, is often enormous. All this development has been impossible up to now. The facilities which the telephone companies possessed were absolutely insufficient to carry out a single-wire system in an efficient manner. The powers which the Post Office now possess will be conceded by the Department to the telephone companies under certain conditions, and it is confidently believed that these powers will be sufficient to enable the companies to establish underground twin-wire system, in all large towns. No doubt, if Parliament would have treated the telephone companies in the same liberal manner that the electric light companies have been treated, there would be less expense and less difficulty in laying the telephone dsstribution system. It is hoped, however, that these difficulties, which still exist, will be all successfully surmounted, and that before long London will have a telephone system laid underground capable of serving 50,000 subscribers in the metropolis alone ; while the other large towns of England will be equally well engineered from the telephonic point of view.

As there seems to have been some misconception in the public mind as to the attitude which the companies have assumed towards one another, and also as to the relation of the companies to the scheme which has been formed by the Post Office, I shall be very glad if, by the insertion of this letter, the public may see that the Act which was passed last Session regarding the telephone industry and the action of the companies themselves is likely to bear immediate and important fruits.

I remain, &c.
(signed) *Marlborough*, Chairman,
Blenheim Palace. New Telephone Company, 110, Cannon-street, London.

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From the late Duke of *Marlborough*, dated 6th September 1892.

To the Editor of the "Times."

Sir,

My friend, Mr. Faithfull Begg, must not put on his tilting suit and send me another challenge through your columns, otherwise I must take up my lance and call upon my lieges to sound the encounter in the lists. We are not where we were last year when our last tournament took place and Mr. Begg appeared on the scene as the champion of the National Telephone Company. Then the lion roared at the lamb and pretended to treat that humble animal with contempt and devour him. To-day the lion is good enough to lie down with its despised brother, and is only too pleased to have been able to construct a happy family ! Now, is Mr. Faithfull Begg under the impression that the general public are so obtuse that they will not see that this phenomenal friendship which has come into existence between the lion and the lamb must have some reason connected with it which points to the fact that the inferiority of power and strength on the part of the lamb was more apparent than real ; otherwise, why should this noble animal, which pretended to possess the whole of England, Scotland, and Ireland as its happy hunting-ground, have condescended to kindly make place for the weaker party ? This very unnecessary attempt to roar on the part of Mr. Begg on behalf of his lion forces me to say something more on behalf of the lamb. We, Sir, the New Telephone Company, sympathized with, and did all in our power to endorse the policy of her Majesty's Government in the matter of the Telephone Bill, which was safely piloted through Parliament last Session by the ability of Sir James Fergusson. That Bill did two things which the lion would have been very glad to have seen left alone. It gave absolute and complete facilities for establishing the twin-wire telephone system all over England, while it conceded these advantages only on the companies giving up their trunk wires. Well, Sir, the New Telephone Company may as well admit that their trunk system was not a very extensive one, and, though the company had the power under their various licences to have erected any amount of trunk lines, they had not done so, nor had the public come forward at that time to give them command of a large capital to do this work. We were, therefore, not adverse to giving up this right if we could obtain complete facilities for establishing a twin system of telephones in all telephone areas. If the lion had not, in a totally unprovoked manner, roared at the lamb, I should not say these things, but, as the truth had better be told, the enemy, "our present friends," were placed in an awkward position. Their entire system all over England is a single-wire system, which is absolutely and totally useless to talk over these Government trunks on, except in audible whispers, mixed with bad language to the offending instrument. The lion thus observed that the lamb might possibly at a not distant day grow up to be a dangerous rival lion, who might divide the British Isles with the older animal. Prudent counsels came into play. Private friendships and mutual appreciation between individuals connected with both interests promoted peace. There was no desire on my part, so far as my influence in these matters had any weight, to rush into a furious contest, and perhaps have to work myself into fiddle-strings to carry on the contest which was inevitable, and of which I sketched the consequences to the shareholders of the National and the public generally in my former letter. Mr. Begg has unadvisably, I venture to think, attempted to roar at me in his present letter, as he thinks thereby to hide the unpalatable fact that the lion has had to climb down along a very comfortable road we have made for him, and along which we propose to proceed together, if possible, as very good business friends.

Mr. Begg suggests that I had bleated a good deal about a 10*l.* telephone. No doubt I have. Had we gone into rate-cutting as between the two companies we would probably have come to this, and I still maintain that it is quite possible that, as the industry increases, a considerably lower rate may be practicable. But, though I did say a good deal more about a lower rate, I said a great deal also about efficiency. It is no doubt convenient to Mr. Begg to avoid allusion to this question. Now, I venture to believe I know as much about the telephone as any of the gentlemen connected with the Old National Company, and perhaps a good deal more, or the New Telephone Company would not to day be a going concern. Mr. Begg will have the pleasure of seeing that the magic "those into whose hands the management had at last fallen" are not entirely the same persons as he entered the lists for a year ago, and that the telephone is not now going to remain a marvellous and most invaluable invention kept in abeyance and undeveloped to suit private interests, but is going to become, in a very few years, a marvellous institution, which will confer on the public, not perhaps at once, Mr. Begg's desired 10*l.* telephone, but a most perfect instrument, which can be placed at the disposal of some 50,000 subscribers to begin with in London, while plans will be arranged so as to admit of even doubling this amount if found desirable. Under this system the network of Government trunks will become really effective as soon as the New Telephone Company and the National have been able to grapple the large country towns and convert old single-wire overhead tackle into good underground twin-wire cable systems. What the public do not understand, but which experts comprehend, is the fact that the entire telephone system throughout all the large towns of England has to be re-done from end to end before a trunk system can be made to work efficiently. No wonder, then, the two telephone companies have adopted the very reasonable course of endeavouring to carry out this work in harmony, instead of wasting their energies in fighting rival systems in every town to the discomfort and confusion of subscribers. In order to bring about these results a reasonable time must be given to the companies, but it is foolish for the public to suppose, as some persons would wish to lead opinion, that the New Telephone Company is in any way a dependency of the National Company, or that the National Company have swallowed up the New. It is no concern of anybody's, except the shareholders in the two companies, what the commercial arrangements and division of work will be between the two corporations. All the public are concerned with at present is, When are we going to have a first-rate telephone system throughout England ? And the answer I give is, Immediately, so soon as wire and telephones can be erected. Their next legitimate inquiry is, What is it going to cost ? And my answer is, The companies do not intend to throw away the dividends of their shareholders in order to give Mr. Faithfull Begg the 10*l.* telephone he is pining for, but there is no doubt that the telephone companies will reduce their charges as their business extends, and that meanwhile the public must not expect all their mercies to come at one moment.

Yours, &c.
Blenheim, Woodstock. (signed) *Marlborough.*

## APPENDIX, No. 8.

PAPER handed in by Major General *C. E. Webber*, C.B., R.E., 14 May 1895.

Subscription Lists will be opened on Friday, the 29th July 1892, and closed at or before four o clock on the same day.

### THE NEW TELEPHONE COMPANY, LIMITED.

Holding a License from Her Majesty's Postmaster-General to establish Telephone Exchanges throughout the United Kingdom.

Nominal Capital, 750,000*l.*, divided into 74,700 Ordinary Shares of 10*l.* each ; and 3,000 Founders' Shares of 1*l.* each (the latter already subscribed), entitled to one-half of the surplus profits after the payment of a dividend of 7 per cent. on the Ordinary Shares.

Of the 74,700 Ordinary Shares, 15,000*l.* in shares were issued on the formation of the Company in 1885. The present issue is for the balance, viz., 73,200 shares, of which one-third (the largest number allowed by the rules of the Stock Exchange) is to be subscribed for at par by the National Telephone Company, Limited, under the agreement hereafter referred to.

Messrs. N. M. Rothschild and Sons are authorised on behalf of the New Telephone Company, Limited, to receive subscriptions for the remaining 48,800 Ordinary Shares of 10*l.* each at par. Payable 1*l.* on application, 1*l.* on allotment, 2*l.* three months after allotment, and the balance as required at intervals of not less than four months. No call at any time to exceed 2*l.*

*Board of Directors:*

His Grace the Duke of Marlborough, Chairman.
*J. S. Forbes, Esq., President of the National Telephone Company, Limited.
*Eli Heyworth, Esq., Director of the National Telephone Company, Limited.
*Colonel R. Raynsford Jackson, Vice-President of the National Telephone Company, Limited.
C. T. Praed, Esq., Director of Lloyd's Bank, Limited.
Sir Albert Kaye Rollit, M.P.
*S. H. Sands, Esq., Director of the National Telephone Company, Limited.
R. W. Wallace, Esq., Director of the Westminster Electric Supply Corporation, Limited.

* Nominated by the National Telephone Company, Limited.

*Bankers:* Lloyd's Bank, Limited.

*Brokers:* Messrs. Foster and Braithwaite, 27, Austin Friars, E.C.

*Solicitors:*

Messrs. Dawes & Sons, 9, Angel-court, E.C. | Messrs. Renshaw, Kekewich & Co., 2, Suffolk-lane. E.C.

*Secretary pro tem.:* W. S. Ogle, Esq.

*Temporary Offices:* 110, Cannon-street, E.C.

#### PROSPECTUS.

THE New Telephone Company, Limited, was incorporated in 1884, and is the possessor of a license granted by the Postmaster General for the establishment of telephone exchanges and communications in the metropolis and throughout the United Kingdom, but the Company has been unable to develop its undertaking until the Telegraphs Act of 1892, which received the Royal Assent on the 28th June last, placed it in a position to deal satisfactorily with the telephonic requirements of the country. This measure provides for the expenditure of 1,000,000*l.* sterling of public money on trunk lines, with the view of co-operating with the companies in the expansion of the telephonic communication of the country.

The National Telephone Company, Limited, has entered into an agreement with this Company, by which it is provided, among other things, that the subscribers on the one system shall be able to communicate with those on the other system ; and the object of the companies will be so to combine their efforts as to work in harmony with the new policy adopted by Her Majesty's Government in providing telephonic facilities for as many subscribers as possible throughout the United Kingdom.

Hitherto the number of subscribers to the telephone in Great Britain and Ireland has been small. For example, in the United States of America, with a population of 62½ millions, there are said to be 245,000 subscribers ; at this rate there should be in the United Kingdom about 145,000 subscribers, instead of about 50,000. In Berlin, where the population is one and a-half million, there are upwards of 17,000 subscribers, and at this rate the number in London should be increased from about 8,800 to over 50,000.

It is intended, therefore, to supply plant on the double-wire (metallic circuit) system to accommodate 10,000 metropolitan subscribers with Central Exchange switchboards and other apparatus capable of working 25,000 London connections. The system to be adopted by the Company will comprise all substantial improvements in telephony, and especially the metallic circuit, which will be available for connection with the Government Trunk system.

The capital outlay for supplying the first 10,000 subscribers in London, and upwards of the same number in the Provinces, including 1,400 private lines and about 400 call offices for public use, for developing the Manchester and Bolton Exchanges, and for opening others in some of the principal provincial towns, has been carefully considered by Mr. A. R. Bennett, acting as the chief engineer and general manager of the Company. His estimates have been checked

checked and approved by Silvanus P. Thompson, D.Sc., F.R.S., and A. B. W. Kennedy, F.R.S., M.I.C.E., Vice-President of the Institution of Mechanical Engineers. It is estimated that 750,000*l.* should suffice for these purposes, and on this basis the net revenue of the Company should be sufficient to show divisible profits equal, at a moderate calculation, to 12 per cent. per annum on the capital, while the additional facilities of the Telegraphs Act, 1892, may be expected to open up new sources of revenue, and thus increase the profits of the Company.

With a view to the development of the Company's business in the manufacturing districts of Lancashire and Yorkshire, and pending the passing of the Telegraphs Act, 1892, the Pioneer Telephone Company was formed for the acquisition and extension of the Mutual Telephone Company, Limited, at Manchester; this business the New Company has taken over, and has now 1,200 exchange instruments in operation there, with several hundred new subscribers waiting to be added. The Pioneer Company has also made an agreement with the City of London Electric Lighting Company, Limited, for a system of underground tubes, and agreements referred to below have been made with other Electric Lighting Companies for similar facilities. All these agreements are subject to the provisions of the Telegraphs Act, 1892. The tubes, the right to use which has been thus provisionally acquired, will be capable of containing such wires as are necessary to develop an extensive telephone system in London. The above arrangements, and the steps already taken by the Pioneer Company, will, it is expected, place this Company in a position to enter upon a dividend-earning stage at a comparatively early date.

The New Telephone Company has agreed to take over from the Pioneer Company the business and works of the Mutual Company, and the balance of the unexpended capital of the Pioneer Company, together with its various leases, contracts and other assets, at the sum of 90,000*l.*, out of which the Pioneer Company will pay the expenses of this issue.

The following Contracts have been entered into, viz. :—

1. Between the Right Honourable George John Shaw Lefevre, M.P., Her Majesty's Postmaster-General, and the New Telephone Company, Limited, dated 16th June 1885.

2. Between the National Telephone Company, Limited, and the New Telephone Company, Limited, dated 14th July 1892.

3. Between the Mutual Telephone Company, Limited, and the Electric and General Investment Company, Limited, dated 1st January 1892.

4. Between the City of London Electric Lighting Company, Limited, and the Pioneer Telephone Company, Limited, dated 31st March 1892.

5. Between the Westminster Electric Supply Corporation, Limited, and the New Telephone Company, Limited, dated 22nd March 1892.

6. Between the Metropolitan Electric Supply Company, Limited, and the New Telephone Company, Limited, dated 11th April 1892.

7. Between the Kensington and Knightsbridge Electric Railway Company, Limited, and the New Telephone Company, Limited, dated 21st July 1892.

8. Between the Telephone Subscribers' Protection Association, Limited, and the New Telephone Company, Limited, dated 25th April 1892.

9. Between the Pioneer Telephone Company, Limited, and the New Telephone Company, Limited, dated 22nd March 1892, and agreement supplemental thereto, dated 27th July 1892.

10. Between the Notting Hill Electric Lighting Company, Limited, and the New Telephone Company, Limited, dated 21st July 1892.

There are numerous other contracts relating to the engagement of employés, the use of telephones in connection with the business at Manchester, Bolton, and other towns, leases of premises in London and other places, and arrangements in connection with this issue, and subscribers shall be deemed to have notice of them, and to have waived any fuller compliance with Section 38 of the Companies Act, 1867, than is herein contained, and to have agreed with the Company as Trustee for the Directors and other persons liable not to make any claim whatever, or take any proceedings under the said section, or under the Directors' Liability Act, 1890, and for avoidance of their contracts in respect of any non-compliance with the said section, or of any misstatement in the prospectus made by the Directors in the belief that it was true.

In due course, application will be made to the Stock Exchange for an official quotation.

Copies of the Memorandum and Articles of Association, and the Contracts above enumerated, can be seen at the offices of the Solicitors, and Prospectuses and Forms of Application may be obtained at Messrs. N. M. Rothschild and Sons, at New Court, St. Swithin's-lane, E.C., and at Lloyd's Bank, Limited, Lombard-street, and other Branches, and of the Stockbrokers of the Company.

27 July 1892.

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MEMORANDUM OF ASSOCIATION OF THE NEW TELEPHONE COMPANY, LIMITED.

1. THE name of the Company is the "New Telephone Company, Limited."

2. The Registered Office of the Company will be situate in England.

3. The objects for which the Company is established are :—

(*a*) To acquire by purchase (either for cash or shares in the Company or partly for cash and partly for shares as may be determined on) or to lease or otherwise acquire rights in the several inventions for improvements in electrical apparatus for the transmission and reproduction of sound, and the several letters patent for Great Britain for the same, granted to Silvanus Phillips Thompson or to the said Silvanus Phillips Thompson and Phillip Jolin jointly, and all extensions therefrom, and all letters patent, whether in Great Britain or elsewhere, which may be granted to him or them jointly for the same inventions or for improvements of the same, and to construct and carry the same into operation.

(*b*) To acquire either wholly or partially, and either by original application or by assignment or otherwise, any letters patent, licenses, rights, privileges, monopolies, secrets, or systems for the use, sale, or manufacture of or otherwise relating to any telephone or telegraphic apparatus, electrical, magnetic, hydraulic, or mechanical apparatus, or any other invention, instrument, or apparatus, which may be directly or indirectly connected therewith or with electricity, magnetism, or acoustics, and capable of being used for any of the Company's purposes, and to experiment with, develop and work any such patent, licence, right, privilege, monopoly, secret, system, apparatus, invention, or instrument.

(*c*) To transmit or contract ~~for the transmission of messages for any state,~~ government, person, corporation or association, by means of telephones or other lawful means, and either in consideration of a payment for each message, or under any contract, or upon any other terms whatsoever, and generally to establish, maintain, and conduct any system of telephonic or other lawful communication between any individuals or classes, or sets of persons, states, governments, corporations, or associations, upon any terms whatsoever.

(*d*) To take and work any licence for the use of any invention, instrument or appliance, or for the exercise of any method or process of manufacture or construction, which may be used by the Company in their business, and to work any invention, instrument, appliance or process after the expiration of a patent or protection.

(*e*) To manufacture, construct, erect, maintain, lay down, use, sell, let on hire, or otherwise deal with, dispose of, and buy, take on hire, or otherwise acquire, and generally to deal in telephones and all machinery, apparatus, works, articles and things connected with the establishing, working, or maintenance of telephonic communication, and every description of electrical, magnetic, hydraulic or mechanical apparatus, or which may be either directly or indirectly conducive to any of the objects of the Company, upon any terms whatsoever.

(*f*) For the purposes of the Company, or any of them, to purchase, take on lease, or in exchange, hire, or otherwise acquire, any real or personal property, or any interest therein, or any wayleaves, easements, rights or privileges therein, and to remove, erect, improve, maintain or otherwise deal with any building or buildings thereon, and in particular to acquire any buildings, ships, barges and other vessels, machinery, rolling stock, plant, stock-in-trade, patents, licenses and trade marks ; and to establish offices, and construct works for the purposes of the Company, and provide buildings and other accommodation for the purpose of enabling users or owners of lines and apparatus, their servants and agents, to communicate with each other.

(*g*) To purchase, or acquire, or to carry on, and administer as principals or agents, the whole or any part of the business or property of any person, firm or Company, or association, carrying on any business comprised in the authorised objects for the time being of this Company, and in connection with any purchase to undertake any part of the liabilities of the vendor, and generally to make and carry into effect any arrangement with any government or authorities supreme, municipal, local or otherwise, or any other person, corporation or body for the use or working of any patent, or other rights or systems acquired by the Company, or for uniting or amalgamating, either in whole or in part, the business of the Company with that of any other Company, corporation, partnership, firm or person for the time being engaged in and carrying on any trade or business of a nature or character similar to any trade or business which the company may be authorised to carry on, or any other business which may be incidental or conducive to the carrying on of the business of the Company, and to lend money to and guarantee the performance of any contract made by any such persons or Company.

(*h*) To subscribe for or otherwise acquire and hold or dispose or the whole or any part of the Shares or Debentures or other interests of and in any company, corporation, partnership, firm or person carrying on or formed with the view of carrying on any business comprised in the objects of this Company, and to assist in the formation of any such company, corporation, partnership or firm or any other company which may be promoted for the purpose of acquiring all or any of the profits and liabilities of this Company, or of advancing directly or indirectly the objects or interests thereof.

(*i*) To sell or otherwise dispose of for such consideration as the Company may think fit, and in particular for cash, shares, stock, or securities of any other company, the whole or any part of the Company's assets.

(*j*) To obtain from any such state, government, or authority as aforesaid any rights, concessions and privileges, which the Company may think conducive to its objects, or any of them, and (if thought fit) to obtain any Act of Parliament for the dissolution of the Company and the incorporation of its members as a new Company, for any of the objects specified in this Memorandum, or for effecting any other alteration in the constitution of the Company.

(*k*) To make all deposits of money or securities, and to do all things necessary for the compliance with the laws or regulations of any Foreign or Colonial Government in places where the Company may be desirous of transacting its business, and for such purpose, if necessary, to procure the Company to be constituted or incorporated as a corporation or synonymous society and to form and carry on or conduct its business through any subsidiary company.

(*l*) To receive money on deposit, at interest or otherwise, and to invest the moneys of the Company not immediately required, upon such securities as may from time to time be determined.

(*m*) To raise money in such manner as the Company shall think fit, and in particular by the issue of Debentures, charged upon all or any of the Company's property (both present and future), including its uncalled capital, and generally to sell, improve, manage, develop, lease, work, mortgage (with or without power of sale), dispose of, or otherwise deal with all or any part of the property of the Company ; and to make, accept, endorse, and execute promissory notes, bills of exchange, and other negotiable instruments.

(*n*) To do all or any of the above things for the time being authorised, and so far as the patent rights of others will admit, in any part of the world, and either singly or in partnership, or conjunction with any person, company, or association, and either as principals, agents, contractors or otherwise, and in carrying on business abroad, to do so in accordance with the custom of foreign companies.

(*o*) To do all such other things as are incidental or conducive to the attainment of the above objects, or any of them.

(*p*) And it is hereby declared that the word " Company " in this Memorandum, except where used in reference to this Company, shall be deemed to include any partnership or other body of persons, whether corporate or incorporate, and whether domiciled in the United Kingdom or elsewhere, and that the objects specified in each paragraph of this clause shall, except where otherwise expressed in such paragraph, be deemed independent objects of the Company, and not liable to be limited by references to any other paragraph.

4. The liability of the members is limited.

5. The Capital of the Company is One Hundred and Twenty Thousand Pounds, divided into Twenty-four Thousand Shares of Five Pounds each, with power to increase such Capital, and to attach to any portion of such Capital, original or increased, such preference and guarantee, or other special privileges or incidents, as may be determined by or in conformity with the Articles and Regulations of the Company from time to time existing.

20 November 1884.

The Capital has since been increased to Seven Hundred and Fifty Thousand Pounds by Special Resolution passed 6th and confirmed 23rd November 1891.

No. _____

FORM OF APPLICATION.

NEW TELEPHONE COMPANY, LIMITED.

ISSUE OF £488,000 IN 48,800 ORDINARY SHARES OF £10 EACH.

TO THE DIRECTORS OF THE NEW TELEPHONE COMPANY, LIMITED.

GENTLEMEN,—Having paid the sum of £_____ as a deposit of £1 per share on _____ Ordinary Shares of £10 each, request you to allot that number of Shares, and agree to accept the same, or any smaller number that may be allotted to , subject to the Memorandum and Articles of Association, and upon the terms of the Prospectus, dated the 27th day of July 1892, authorise you to place name on the Register of Members in respect of the Shares so to be allotted to , and engage to pay the further instalments upon such allotted Shares as the same shall become due, in default of which previous payments shall be liable to forfeiture.

Name in full _____

Address _____

Description _____

Ordinary Signature _____

Dated 29 July 1892.

## APPENDIX, No. 9.

PAPER handed in by Mr. *W. H. Dickinson.*

## LONDON COUNTY COUNCIL.

Sir, Spring Gardens, S.W., 6 May 1895.

You are probably aware that a Select Committee on Telephone Service has been appointed, "to consider and report whether the provision now made for the telephone service in" London and other "areas is adequate, and whether it is expedient to supplement or improve this provision either by the granting of licences to local authorities or otherwise."

The Highways Committee of the London County Council, to whom the duty of procuring evidence on this matter is referred, being of opinion that telephone service in the metropolis should be rendered cheaper and more efficient, have submitted their views to this effect to the Select Committee, and similar evidence has been tendered by the Commissioners of Sewers of the City of London.

The Committee of the Council are anxious to know accurately what is the opinion of the users of telephones in London as regards efficiency, and I am therefore directed to ask if you will kindly answer the undermentioned questions on the accompanying form of reply, and return it to me at your earliest convenience.

Yours, &c.
(signed) *H. De la Hooke,*
Clerk of the Council.

(*a*) Is the existing telephone service of the National Telephone Company efficient, and satisfactory to you?

(*b*) If it is not satisfactory, in what respects is it unsatisfactory?

(*c*) What suggestions (if any) would you make for the improvement of the service?

To the Clerk of the London County Council, Spring Gardens, S.W.

Sir, May 1895.

As a subscriber to the National Telephone Company in the London district, I subjoin answers to the questions put to me in your letter of the 6th instant :—

(*a*) Is the existing telephone service of the National Telephone Company efficient, and satisfactory to you?

(*b*) If it is not satisfactory, in what respects is it unsatisfactory?

(*c*) What suggestions (if any) would you make for the improvement of the service?

Signature_____

Address_____

_____

Telephone No._____

## APPENDIX, No. 10.

PAPER handed in by Mr. *James Staats Forbes.*

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

THE underwritten Memorandum has been sent to the Company's London Exchange subscribers, with the following results :—

### MEMORANDUM.

I (or we) do not approve of the telephone service of the metropolis being undertaken by the London County Council, and am (or are) satisfied that the service given by the National Telephone Company is reasonable, having regard to the efforts which are being made by the company to improve it by the adoption of the twin-wire system.

Signature_____

Address_____

Subscriber's No. _____

### RESULTS.

| | |
|---|---|
| Signed unconditionally | 2,346 |
| Signed with qualifications | 266 |
| Signed in favour of the London County Council | 43 |
| Refused to sign | 36 |
| | 2,691 |
| Number of Exchange subscribers | 8,208 |

Oxford-court, Cannon-street, E.C.,
May 1895.

*Wm. E. L. Gaine,*
General Manager.

## APPENDIX, No. 11.

PAPER handed in by Mr. *James Staats Forbes*, 21 May 1895.

## NATIONAL TELEPHONE COMPANY.

### Telephone Chronology.

| | Dated. | Expired. |
|---|---|---|
| Bell's Patent, 4765 | 9 Dec. - 1876 | 9 Dec. - 1890 |
| Edison's Patent, 2909 | 30 July - 1877 | 30 July - 1891 |
| Bell and Edison Companies, amalgamated as United Company | | 13 May - 1880 |
| United Company started business | | 13 May - 1880 |
| Judgment in Post Office action, declaring a telephone to be a telegraph, and therefore covered by Post Office monopoly | | 20 Dec. - 1880 |
| First license to United Company | | 11 April - 1881 |
| Second license to United Company | | 29 Nov. - 1884 |

United Company only commenced business after Bell's Patent had run three years and four months. And they worked under agreement and the first license from 13th May 1880 to 1st December 1884; four years and six months.

Besides United, several other licenses had been granted.

Amalgamation of the United, Lancashire and Cheshire, and National Companies took place 1st May 1889, under the name of National Company.

Other affiliated companies have since been gradually absorbed in accordance with the conditions of the agreement with the Post Office, negotiated in 1892.

As effect of amalgamation, and in view of the approaching expiration of the patents:—

1st May 1890, subscription in Manchester, Liverpool, and Warrington, reduced from 20*l.* to 15*l.*

1st January 1891, general reduction of rates in the provinces from 15*l.* and 12*l.* to 10*l.*, involving an immediate loss of revenue of 55,000*l.* per annum on the then number of subscribers.

### Development of National Company up to April 1895.

| | |
|---|---|
| Number of towns and places supplied | 537 |
| Number of exchanges open | 593 |
| Number of subscribers' lines | 75,216 |
| Number of telephones in use | 86,032 |
| Present ratio of effective calls per annum | 139,639,032 |
| Equivalent to (at the least) messages | 279,278,064 |
| Average annual payment per line | 9*l.* 2*s.* 2*d.* |
| Average cost to subscribers per message | ·58 of a penny |
| Estimated minimum average number of words per message | 100 |
| Average annual payment as above | 9*l.* 2*s.* 2*d.* |
| Average per week | 3*s.* 6*d.* |
| Average per day (Sunday included) | 6*d.* |

Every subscriber can, therefore, at his discretion, have the use of the telephone day and (in most places) night, for the price of a sixpenny telegram.

And whereas 100 words by telegraph would cost 4*s.* 2*d.*, the average cost per message (minimum 100 words) by telephone is ·58 of a penny.

COMPARISON of Charges with those of other European Countries.

The average annual charge per line is 9*l.* 2*s.* 2*d.*

What could this charge be on the assumption that the National Company were relieved from those direct and extraneous charges not pressing, or very slightly pressing, upon State telephones abroad?

These are—A. Royalty, way-leaves, rates, and taxes.
B. Greater relative scales of salaries, wages, and rents of premises.

In the year ending 31st December 1894, the working expenses of the National Company amounted to 456,809*l.* 15*s.* 4*d.*, or 62 per cent. of the telephone revenue.

The charges under A. amounted to 147,938*l.* 10*s.* 1*d.*=20·00 per cent.

The charges under B. amounted to 214,123*l.*

| | £. | £. |
|---|---|---|
| 1. Line and instrument repairs - - 93,537*l.* | | |
| In this amount wages stand for 72·87 per cent. of the whole= - - | 68,157 | |
| The wages paid in Great Britain to the people employed in this category are 33 per cent. higher than abroad= - - - - - | | 22,719 |
| 2. Salaries of officers, clerks, head office expenses, and rents of premises - | 120,586 | |
| The salaries, wages, and rents paid in respect to the second category are at least 30 per cent higher than abroad= - - - - - - | | 36,160 |
| So that - - - - - -

Middlesborough, Linthorpe.
Middlesborough, Norton.
Middlesborough, Eaglescliffe.
Middlesborough, Yarm.
West Hartlepool.
Hartlepool.
Hartlepool, Seaton Carew.
Hartlepool, Greatham.
Durham.
Bishop Auckland.
Consett.
Consett, Shotley Bridge.
Consett, Leadgate.
Chester-le-Street.
Darlington.
Newcastle, Quay Side.
Newcastle, Jesmond.
Newcastle, Byker.
Newcastle, Elswick.
Newcastle, Gosforth.
Newcastle, Gateshead.
Newcastle, Low Fall.
Newcastle, Wallsend.
Newcastle, Blaydon.
Hexham.
Hexham, Corbridge.
Alnwick.
Alnwick, Alnmouth.
Berwick.
Blyth.
Morpeth.
Sunderland.
Sunderland, Seaham.
Sunderland, Houghton.
Sunderland, Ryhope.
Sunderland, Hylton.
Sunderland, Boldon.
South Shields.
South Shields, Jarrow.
North Shields.
North Shields, Tynemouth.
North Shields, Whitley.
Hull.
Hull, Billingsgate.
Leeds.
Leeds, Roundhay
Leeds, Headingley.
Dewsbury, Cleckheaton.
Dewsbury, Heckmondwike.
Liverpool, Central.
Liverpool, Sefton Park.
Liverpool, Waterloo,
Liverpool, Wavertree.
Liverpool, Lark-lane.
Liverpool, West Derby.
Liverpool, Liscard.
Liverpool, Rock Ferry.
Liverpool, Claughton.
Liverpool, Neston.
Liverpool, Upton.
Liverpool, Heswall.
Ormskirk.
Manchester, Central.
Manchester, Altrincham.
Blackburn.
Blackburn, Accrington.
Burnley.
Preston.
Lancaster.
Lancaster, Morecambe.
Kendal.
Oldham.
Buxton.
Bolton.
Warrington.
Widnes.
St. Helens.
Wigan, Ashton-in-Makerfield.
Wigan, Newton-le-Willows.
Chester.
Llandudno.
Llandudno, Colwyn Bay.
Northwich.
Northwich, Middleswich.
Northwich, Winsford.
Wrexham.
Wrexham, Ruabon.
Crewe.
Wolverhampton.
Birmingham, Acock Green.
Birmingham, Brierley Hill.
Leicester, Stoney Gate.
Newark.
Northampton.
Northampton, Wellingborough.
Lincoln.
Sheffield, Central.
Sheffield, Thorne.
Norwich.
Lowestoft.
Cambridge.
Peterborough.
Reading.
Reading, Henley.
Slough.
Sheffield, Maidenhead.
Sheffield, Marlow.
Guildford.
Guildford, Godalming.
Guildford, Aldershot.
Guildford, Aldershot (North Camp).
Watford.
Watford, Rickmansworth.
St. Albans.
Brighton.
Canterbury.
Ramsgate.
Folkestone.
Chatham.
Chatham, Rochester.
Maidstone.
Sevenoaks.
Gravesend.
Southampton.
Fareham.
Plymouth.
Plymouth, Devonport.
Plymouth, Mutley.
Plymouth, Ivybridge.
Cardiff, New-street.
Cardiff, Working-street.
Cardiff, Docks.
Cardiff, Penarth.
Cardifi, Barry Docks.
Cardiff, Llandaff.
Pontypridd.
Aberdare.
Aberdare, Merthyr.
Pontypool.
Pontypool, Tredegar.
Bridgend.
Newport
Lydney.
Chepstow.
Swansea.
Swansea, Morriston.
Swansea, Mumbles.
Llanelly.
Port Talbot.
Port Talbot, Neath.
Port Talbot, Briton Ferry.
Bristol.
Bristol, Stoke Bishop.
Gloucester, Brinscombe.
Gloucester, Stonehouse.
Gloucester, Nailsworth.
Gloucester, Stroud.
Taunton.
Sharpness.
Dublin, Killiney.
Dublin, Dundrum.
Londonderry.
Londonderry, Brookhall.

The modern Boards at Glasgow have cost upwards of 19,000*l.*, and further extensions are in progress; the work of completing metallic circuiting the entire metropolitan system has, during the past three years, been most actively pushed forward, about 75 per cent. of the work is completed, and it is anticipated that the whole will be finished at the end of the present year. The cost of this work will be about 200,000*l.*

*Wm. E. L. Gaine,*
General Manager.

Oxford-court, Cannon-street, London, E.C.,
May 1895.

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COMPARATIVE STATISTICS relating to Mutual Telephone Company in Manchester.

1. Date when Mutual Company's Exchange was opened in Manchester, 28th February 1891.

2. Number of subscribers to the Mutual Company at opening, 170.

3. Number of subscribers to the New Telephone Company (late Mutual) at end of April 1895, 1,349.

4. Number of National Company's subscribers at the date when the Mutual Company commenced 28th February 1891, 1,944.

5. Number of National Company's subscribers in Manchester and Bolton at end of April 1895, 3,374.

6. Number of National Company's subscribers who gave up the National to join the Mutual, 27.

7. Number of National Company's subscribers who were also New Company's subscribers at end of April 1895, 492.

8. Analysis of rates paid by New Company's subscribers—

| | | £. |
|---|---|---|
| 501 | at | 10 |
| 20 | at | 8 |
| 709 | at | 6 |
| 119 | at | 5 |
| 1,349 | | |

*Wm. E. L. Gaine,*
General Manager.

Oxford-court, Cannon-street, London, E.C.,
May 1895.

STATEMENT showing Increases in the Numbers of Subscribers in the Four Large Scotch Towns during the last Five Years.

GLASGOW.

| Year ending 31st March. | Number of Lines. | Increase in Lines. |
|---|---|---|
| 1890 | 2,652 | — |
| 1891 | 3,374 | 722 |
| 1892 | 4,247 | 873 |
| 1893 | 4,651 | 404 |
| 1894 | 4,938 | 287 |
| 1895 | 5,292 | 354 |
| TOTAL Increase during last Five Years | | 2,640 |

DUNDEE.

| Year ending 31st March. | Number of Lines. | Increase in Lines. |
|---|---|---|
| 1890 | 837 | — |
| 1891 | 937 | 100 |
| 1892 | 1,023 | 86 |
| 1893 | 1,120 | 97 |
| 1894 | 1,224 | 104 |
| 1895 | 1,309 | 85 |
| TOTAL Increase during last Five Years | | 472 |

EDINBURGH.

| Year ending 31st March. | Number of Lines. | Increase in Lines. |
|---|---|---|
| 1890 | 746 | — |
| 1891 | 913 | 167 |
| 1892 | 1,207 | 294 |
| 1893 | 1,379 | 172 |
| 1894 | 1,553 | 174 |
| 1895 | 1,787 | 234 |
| TOTAL Increase during last Five Years | | 1,041 |

ABERDEEN.

| Year ending 31st March. | Number of Lines. | Increase in Lines. |
|---|---|---|
| 1890 | 584 | — |
| 1891 | 626 | 42 |
| 1892 | 726 | 100 |
| 1893 | 775 | 49 |
| 1894 | 923 | 148 |
| 1895 | 1,063 | 140 |
| TOTAL Increase during last Five Years | | 479 |

Oxford-court, Cannon-street, London, E.C.
May 1895.

*Wm. E. L. Gaine*,
General Manager.

STATEMENT of Number of Complaints by Subscribers for Year 1894.

| NAME OF DISTRICT. | Average Number of Complaints per Exchange Subscribers' Line for Year ending 31st Dec. 1894. | Average Number of Exchange Messages, Local and Trunk, per Exchange Subscribers' Line for Year ending 31st Dec. 1894. |
|---|---|---|
| Glasgow | 3·79 | 4,488 |
| Edinburgh | ·09 | 4,546 |
| Dundee | ·03 | 5,322 |
| Aberdeen | 1·49 | 4,644 |
| Greenock | ·55 | 2,751 |
| Galashiels | ·10 | 2,696 |
| Kirkcaldy | ·26 | 2,812 |
| Kilmarnock | ·48 | 1,831 |
| Hamilton | ·36 | 3,313 |
| Dumbarton | — | 1,434 |
| Falkirk | ·73 | 3,945 |
| Dumfries | ·07 | 1,992 |
| Inverness | ·24 | 1,722 |
| Oban | — | 712 |
| Newcastle | ·60 | 3,555 |
| Middlesboro' | ·54 | 4,403 |
| Hull | ·43 | 3,855 |
| Leeds | 1·02 | 7,101 |
| Bradford | ·89 | 5,763 |
| Liverpool | 2·16 | 7,290 |
| Manchester | 1·56 | 8,663 |
| Blackburn | ·34 | 2,966 |
| Oldham | ·28 | 3,227 |
| Bolton | 2·47 | 3,697 |
| Warrington | 1·61 | 4,137 |
| Whitehaven | ·24 | 2,474 |
| Chester | ·71 | 1,623 |
| Douglas | ·10 | 3,687 |
| Birmingham | ·38 | 3,949 |
| Hanley | ·65 | 5,564 |
| Nottingham | ·71 | 4,025 |
| Sheffield | ·31 | 3,430 |
| Norwich | ·78 | 1,894 |
| Reading | ·29 | 2,346 |
| Brighton | ·91 | 2,690 |
| Canterbury | ·71 | 1,105 |
| Southampton | ·47 | 3,090 |
| Plymouth | 1·28 | 3 251 |
| Cardiff | ·39 | 3,205 |
| Bristol | 1·05 | 4,026 |
| Belfast | ·47 | 5,703 |
| Dublin | 1·30 | 2,735 |
| London | ·94 | 2,944 |
| Average of United Kingdom | ·73 | 3,595 |

The number of Messages is arrived at by treating each Subscriber's Call when put through as being two Messages, *i.e.*, question and reply.

The Messages are "Exchange" line Messages only, as the Company has no means of ascertaining the number of "Private" line Messages, which would be additional to the above figures. The number of complaints in Glasgow was greatly increased by a change of working, which was effected early in 1894. The complaints include the Private lines as well as the Exchange lines.

Oxford-court, Cannon-street, London, E.C.,
April 1895.

*Wm. E. L. Gaine*,
General Manager.

STATEMENT of Foreign Telephone Tariffs

| Company or State. | Place. | Tariff. | Royalty. | Free Speaking Area. | Number of Subscribers. |
|---|---|---|---|---|---|
| | | £. s. d. — *Dollars.* | | | |
| Company | Baltimore U.S.A. | 32 — — — *Dollars.* 160 | | | |
| Company | Boston „ | 36 — — — 180 | | | |
| Company | Chicago „ | 35 — — — 175 | | | |
| Company | Cincinnati „ | 24 — — — 120 | | | |
| Company | Pittsburg „ | 27 15 — — 138 | | | |
| Company | Providence „ | 24 — — — 120 | | | |
| Company | Rochester „ | 24 16 — — 124 | | | |
| Company | Washington „ | 32 — — — 160 | | | |
| Company | Philadelphia „ | 32 — — — 160 | | | |
| Company | New York „ | 48 — — — 240 | | | |
| Company | Albany „ | 20 — — — 100 | | | |
| Company | Hartford „ | 25 — — — 125 | | | |
| Company | Worcester „ | 21 — — — 105 | | | |
| Company | Troy „ | 20 — — — 100 | | | |
| Company | Brussels | Single wire, 10*l.*, within a radius of three kilometres of the Exchange; 2*l.* for each kilometre beyond this distance, and 1*l.* 13*s.* 4*d.* for each extra kilometre. | None | City of Brussels | 2,400. |
| Company | Amsterdam | £. 9 16*s.* 8*d.* for one kilometre<br>*Note.*—Service from 8 a.m. to 10 p.m. only. Houses in the suburbs, such as Neuwer-Amstel, 12*l.* 10*s.* Houses in the Ouder-Amstel, 20*l.* 16*s.* | None | About 30 square miles | 4,344. |
| State | Geneva | £. 4 15*s.* 2*d.*, first year; 4*l.*, second year; 3*l.* 4*s.* 2*d.*, for each year following, within three kilometres of the Exchange, with an extra charge beyond this distance of 3 francs for each 100 metres. The above tariff only gives the subscriber a right to 800 conversations per annum; beyond that number an extra charge is made of 5 francs for each 100 or part of 100 conversations. | None | 250 square kilometres | About 2,600. |
| State | Berlin | £. 7 10*s.* within a radius of three kilometres; beyond this distance, 3 marks for each 100 metres. | None | Within a radius of five kilometres from the Central Exchange. | 22,070. |
| Company | St. Petersburg | £. 39 11*s.* within about two miles | — | St. Petersburg | 1,944. |
| Company | Lisbon | £. 10 within one kilometre of the exchange | 3 per cent. | The area is included in a radius of thirty kilometres from the Exchange. | 1,106, includes private lines. |
| State | Paris | £. 16, and subscribers pay for instruments and for keeping same in repair. | None | City of Paris | 28,092, in the whole of France. |
| State | Adelaide | £. 10 per annum within one mile | None | City of Adelaide. | |
| State | Sydney | £. 12 per annum within one mile | None | City of Sydney. | |
| State | Melbourne | £. 12 per annum within one mile | None | City of Melbourne. | |
| Company | New York | £. 48 | None | Manhattan Island, area about 20 square miles. | |
| State | Vienna | £. 10 within radius of two kilometres | — | Radius of fifteen kilometres | 7,900. |

## APPENDIX, No. 12.

PAPER handed in by Mr. *James Staats Forbes*, 24 May 1895.

## THE TELEPHONE COMPANY, LIMITED.

### General Statement of Tariffs.

### I.—Metropolitan Area.

ON A FIVE YEARS' AGREEMENT.

| | £. | s. |
|---|---|---|
| First connection | 17 | – |
| Second and additional connections | 12 | 15 |
| Private houses | 10 | – |

ON A YEARLY AGREEMENT.

| | £. | s. |
|---|---|---|
| First connection | 20 | – |
| Second and additional connections | 15 | – |
| Private houses | 12 | – |

These tariffs include free speaking throughout an area of 630 square miles, which comprises the towns of Dartford, Reigate, Redhill, Croydon, Epsom, Richmond, and Kingston, on the south side of the Thames, and Tilbury, Woodford, Romford, Epping, West Ham, Harrow, Ealing, and Hampton Court, on the north side of the Thames.

### II.—Great Towns.

Such as Manchester, Liverpool, Blackburn, Leeds, Bradford, Dundee, Edinburgh, Birmingham, Dublin, Belfast, &c., &c.

These tariffs apply to all subscribers [with some exceptions due to local physical, or other special conditions] whose premises are situated within a radius of one mile of the nearest exchange, the extra charge for each additional half-mile being an additional 2*l.* 10*s.* per annum.

ON A FIVE YEARS' AGREEMENT.

| | £. | s. |
|---|---|---|
| First connection | 10 | – |
| Second and additional connections | 8 | 10 |

The area or radius for free speaking varies greatly, according to local conditions. As examples of these areas the Manchester area includes the city of Manchester, the county borough of Salford, the municipal borough of Eccles, and the urban districts of Altrincham, Bowdon, Stretford, Wilmslow, and Cheadle-and-Gatley, including Handforth, and extends for 150 square miles.

The Liverpool free area includes the city of Liverpool, the county boroughs of Birkenhead and Bootle, and the urban districts of Walton-on-the-Hill, West Derby, Wallasey, Much Woolton, Childwall, West Kirby and Hoylake, Neston and Parkgate, Bromborough, Lower Bedington, Wavertree, and Huyton, and extends for 158 square miles.

The Blackburn free area includes the county borough of Blackburn, the municipal boroughs of Clitheroe, Chorley, Darwen, and Accrington, and the urban districts of Clayton-le-Moors, Church, Oswaldtwistle, Longridge, Rishton, Withnell, and Adlington, and extends for 139 square miles.

The Leeds free area includes the city of Leeds, the municipal borough of Morley, and the urban districts of Drighlington, Tong, Gildersome, Methley, Ilkley, Otley, Rawdon, and Guisley, and extends for 164 square miles.

The Bradford free area includes the county borough of Bradford, the municipal borough of Keighley, and the urban districts of Bingley, Calverley, Skipton, Haworth, Shipley, Thornton, Baildon, Ilkley, Otley, Rawdon, and Guiseley, and extends for 183 square miles.

The Dundee free area includes the Royal and Parliamentary burgh of Dundee, and the police burghs of Broughty Ferry and Carnoustie, and extends for 46 square miles.

The Edinburgh free area includes the Royal and Parliamentary burgh of Edinburgh, the Parliamentary burghs of Leith, Portobello, and Musselburgh, and the police burghs of Dalkeith, Lasswade, and Loanhead, and extends for 84 square miles.

The Birmingham free area includes the city of Birmingham, and the county borough of West Bromwich, the municipal borough of Sutton Coldfield, and the urban districts of Bromsgrove (town and country), and Oldbury, including Knowle, and extends for 175 square miles.

The Dublin free area includes the city of Dublin, and the townships of Bray, Clontarf, Kingstown, and Blackrock, and extends for 211 square miles.

The Belfast free area includes the city of Belfast, the townships of Carrickfergus, Newtownards, Bangor, Dromore, Lurgan, and Portadown, including Larne and Comber, and extends for 543 square miles.

### III.—Large Towns.

Such as Norwich, Exeter, Chester, Bath, Chelmsford, Ipswich, Colchester, Worcester, Wolverhampton, Stafford, and Lincoln.

First Connections.

| | £. | s. |
|---|---|---|
| Within ½-mile of the Exchange | 8 | – |
| Within ¾ " " " | 9 | – |
| Within 1 " " " | 10 | – |

SECOND CONNECTIONS.

| | £. | s. |
|---|---|---|
| Within ½-mile of the Exchange | 6 | 15 |
| Within ¾ „ „ „ | 7 | 13 |
| Within 1 „ „ „ | 8 | 10 |

With a charge of 2*l.* 10*s.* for every additional half-mile.

The Norwich free area includes the city of Norwich, and extends for 53 square miles.

The Exeter free area includes the city of Exeter, and the urban districts of Crediton and Exmouth, and extends for 141 square miles.

The Chester free area includes the city of Chester, and extends for 67 square miles.

The Bath free area includes the city of Bath, and extends for 49 square miles.

The Chelmsford free area includes the municipal boroughs of Chelmsford and Maldon, and the urban district of Witham, and extends for 167 square miles.

The Ipswich free area includes the county borough of Ipswich, and the urban districts of Stowmarket, Felixstowe, and Walton, and extends for 62 square miles.

The Colchester free area includes the municipal borough of Colchester, including Nayland, Wyvenhoe, and Brightlingsea, and extends for 164 square miles.

The Worcester free area includes the city of Worcester, the municipal borough of Droitwich, and the urban district of Malvern, and extends for 66 square miles.

The Wolverhampton free area includes the county borough of Wolverhampton, and the urban districts of Bilston, Tettenhall, and Sedgeley, including Bushbury, and extends for 32 square miles.

The Stafford free area includes the municipal borough of Stafford, Brocton, Penkridge, and Dunston, an extends for 24 square miles.

The Lincoln free area includes the city of Lincoln, and extends for 36 square miles.

## IV.—SMALL OUTLYING AND ISOLATED TOWNS.

### Elgin, Oban, &c.

FIRST CONNECTIONS.

| | £. | s. |
|---|---|---|
| Within ½-mile of the Exchange | 6 | 10 |
| Within 1 „ „ „ | 8 | – |

2*l.* 10*s.* each additional half-mile.

Oxford-court, 22 March 1895.

## APPENDIX, No. 13.

PAPERS handed in by Mr. *James Staats Forbes*, 24 May 1895.

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

STATEMENT of LOCAL MESSAGES (exclusive of Trunk Messages) for one Day (3rd April 1895) passing through the Exchanges at *Glasgow*, *Aberdeen*, and *Edinburgh*.

| Time occupied in placing Subscribers into Effective Communication. | Number of Messages. | Reasons for Delay in making Connections. |
|---|---|---|
| GLASGOW : | | |
| Under ½ minute | 59,020 | |
| „ 1 „ | 4,590 | |
| „ 1½ minutes | 974 | |
| „ 2 „ | 698 | |
| „ 2½ „ | 260 | Subscribers not answering quickly, others being engaged, and junction lines being engaged. |
| „ 3 „ | 572 | |
| „ 3½ „ | 54 | |
| „ 4 „ | 326 | |
| „ 4½ „ | 218 | |
| 5 minutes and over | 2,694 | |
| | 69,406 | |
| ABERDEEN : | | |
| Under ½ minute | 14,050 | |
| „ 1 „ | 490 | |
| „ 1½ minutes | 394 | Subscribers called for, engaged, or not answering quickly. |
| „ 3 „ | 66 | |
| „ 5 „ | 54 | |
| | 15,054 | |
| EDINBURGH : | | |
| Under ½ minute | 12,130 | |
| „ 1 „ | 1,956 | |
| „ 1½ minutes | 1,298 | |
| „ 2 „ | 1,428 | |
| „ 2½ „ | 628 | |
| „ 3 „ | 1,018 | |
| „ 3½ „ | 110 | Subscribers not answering, subscribers engaged, or junction wires engaged. |
| „ 4 „ | 250 | |
| „ 4½ „ | 34 | |
| 5 minutes and over | 750 | |
| | 19,602 | |
| LONDON, Queen Victoria-street Exchange : | | |
| Number of Messages dealt with by one Operator in charge of 50 Subscribers during 7 hours (10 a.m. to 5 p.m.) on the 3rd April 1895 : | | |
| Under ½ minute | 176 | |
| „ 1 „ | 146 | |
| „ 1½ minutes | 116 | |
| „ 2 „ | 20 | |
| „ 2½ „ | 34 | |
| „ 3 „ | 4 | |
| „ 3½ „ | 8 | |
| „ 4 „ | 2 | |
| „ 5 „ | 2 | |
| TOTAL | 508 | |

*Note.*—Each subscriber's call is counted as two messages, that is, a "question" and "reply."

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

RETURN of Local Messages through a few Important Exchanges on the Company's System.

| NAME OF EXCHANGE. | Number of Exchange Subscribers. | Number of Local Messages per Day (including Sundays) exclusive of Trunk Messages. | Average Number of Local Messages per Day (including Sundays), per Exchange Subscribers' Line, exclusive of Trunk Messages. | Cost to Subscribers per Message. |
|---|---|---|---|---|
| | | | | £. s. d. |
| Lime-street Exchange (London) | 2,135 | 22,625 | 11 | - - 1·04 |
| Central Exchange (Birmingham) | 1,388 | 16,463 | 12 | - - ·53 |
| Central Exchange (Blackburn) | 558 | 6,194 | 11 | - - ·51 |
| Swan Arcade Exchange (Bradford) | 1,378 | 19,685 | 14 | - - ·44 |
| West-street Exchange (Brighton) | 809 | 7,062 | 9 | - - ·70 |
| High-street Exchange (Bristol) | 681 | 10,157 | 15 | - - ·42 |
| Central Exchange (Halifax) | 312 | 4,526 | 15 | - - ·42 |
| Central Exchange (Huddersfield) | 330 | 7,850 | 24 | - - ·26 |
| Central Exchange (Hull) | 742 | 8,870 | 11 | - - ·51 |
| Park-place Exchange (Leeds) | 1,574 | 40,789 | 26 | - - ·23 |
| Central Exchange (Leicester) | 539 | 6,400 | 12 | - - ·52 |
| Royal Exchange Exchange (Liverpool) | 3,938 | 96,644 | 25 | - - ·25 |
| Royal Exchange Exchange (Manchester) | 2,962 | 70,952 | 24 | - - ·27 |
| Quay Side Exchange (Newcastle) | 853 | 6,518 | 8 | - - ·78 |
| Central Exchange (Nottingham) | 731 | 10,096 | 14 | - - ·43 |
| Central Exchange (Oldham) | 340 | 3,956 | 11 | - - ·53 |
| Millbrook Exchange (Plymouth) | 305 | 3,860 | 13 | - - ·41 |
| Central Exchange (Reading) | 327 | 2,969 | 9 | - - ·59 |
| Commercial-street Exchange (Sheffield) | 2,152 | 20,652 | 10 | - - ·48 |
| Arcade Exchange (Sunderland) | 725 | 9,096 | 13 | - - ·47 |
| Central Exchange (Aberdeen) | 866 | 11,966 | 14 | - - ·37 |
| Central Exchange (Dundee) | 784 | 15,199 | 19 | - - ·27 |
| George-street Exchange (Edinburgh) | 407 | 4,811 | 12 | - - ·51 |
| Royal Exchange Exchange (Glasgow) | 3,169 | 39,957 | 13 | - - ·54 |
| Town Hall Exchange (Greenock) | 402 | 2,974 | 7 | - - ·72 |
| High-street Exchange (Belfast) | 932 | 16,334 | 18 | - - ·39 |
| Dame-street Exchange (Dublin) | 973 | 8,392 | 8 | - - ·66 |

*N.B.*—The number of messages is arrived at by treating each effective call by a subscriber as being two messages, that is, a question and a reply, though from the nature of the case many questions and replies pass in the course of a conversation. Only effective calls are dealt with in this return, that is to say, calls by subscribers which are effectively put through so as to enable them to speak to their correspondents.

The number of messages is based upon a return of the calls for the week ending 28th March 1895, and dividing the total number by seven, the Sunday is therefore included.

No messages involving the use of a "trunk" line are included in this return.

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

COMPARATIVE STATEMENT of TELEGRAPHIC SERVICE, extracted from the "Journal Telegraphique," of certain European Countries, with Ratio per Head of Population.

| | RUSSIA. | ITALY. | ROUMANIA. | HUNGARY. | SWEDEN. | AUSTRIA. | GERMANY. |
|---|---|---|---|---|---|---|---|
| Grand Total of Telegrams - - | 13,193,257 | 9,681,912 | 1,649,294 | 6,522,302 | 2,101,850 | 12,068,064 | 33,172,116 |
| Population - - - - - | 120,000,000 | 30,347,291 | 5,040,000 | 17,349,398 | 4,824,150 | 23,895,413 | 49,423 470 |
| Telegrams per Head - - - | ·109 | ·319 | ·327 | ·375 | ·435 | ·505 | ·671 |

| | DENMARK. | NORWAY. | BELGIUM. | LOW COUNTRIES. | FRANCE. | SWITZERLAND. | GREAT BRITAIN AND IRELAND. |
|---|---|---|---|---|---|---|---|
| Grand Total of Telegrams - - | 1,817,718 | 1,740,180 | 5,414,864 | 4,429,771 | 47,017,117 | 3,838,323 | 73,299,237 |
| Population - - - - - | 2,172,380 | 2,001,000 | 6,069,321 | 4,732,911 | 38,343,192 | 2,917,819 | 38,520,116 |
| Telegrams per Head - - - | ·836 | ·869 | ·892 | ·935 | 1·226 | 1·315 | 1·902 |

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

STATEMENT showing Number of LINES and POPULATION at various Centres at 31st December 1894.

### SCOTLAND.

| CENTRES. | Number of Lines. | Population. | Population per Line. |
|---|---|---|---|
| Glasgow | 5,221 | 565,839 | 108 |
| Edinburgh | 1,741 | 329,932 | 189 |
| Dundee | 1,291 | 153,308 | 118 |
| Perth | 190 | 29,919 | 157 |
| Montrose | 55 | 35,900 | 652 |
| Aberdeen | 1,029 | 122,002 | 118 |
| Greenock | 576 | 63,423 | 110 |
| Paisley | 412 | 66,425 | 161 |
| Galashiels | 352 | 17,252 | 49 |
| Kirkcaldy | 431 | 53,756 | 124 |
| Kilmarnock | 285 | 52,426 | 184 |
| Hamilton | 330 | 43,585 | 132 |
| Dumbarton | 180 | 16,927 | 94 |
| Falkirk | 134 | 16,620 | 124 |
| Dumfries | 135 | 17,821 | 132 |
| Inverness | 216 | 19,303 | 89 |
| Oban | 83 | 3,337 | 40 |
| TOTAL | 12,661 | 1,607,775 | 127 |

### IRELAND.

| CENTRES. | Number of Lines. | Population. | Population per Line. |
|---|---|---|---|
| Belfast | 1,237 | 323,444 | 231 |
| Londonderry | 116 | 38,213 | 322 |
| Dublin | 1,350 | 323,984 | 239 |
| Cork | 461 | 87,673 | 190 |
| Limerick | 155 | 37,155 | 239 |
| TOTAL | 3,319 | 810,469 | 244 |

ENGLAND AND WALES.

| Centres. | Number of Lines. | Population. | Population per Line. |
|---|---|---|---|
| **Northern Province:** | | | |
| Newcastle | 1,271 | 327,894 | 257 |
| Sunderland | 1,133 | 305,189 | 260 |
| Middlesboro' | 517 | 133,973 | 257 |
| West Hartlepool | 345 | 42,710 | 123 |
| Durham | 272 | 71,625 | 263 |
| Hull | 778 | 200,044 | 257 |
| York | 147 | 67,004 | 455 |
| Scarboro' | 109 | 33,776 | 309 |
| Grimsby | 144 | 51,936 | 360 |
| Goole | 28 | 15,416 | 514 |
| Leeds | 2,090 | 396,411 | 156 |
| Dewsbury | 529 | 109,320 | 206 |
| Wakefield | 197 | 56,991 | 289 |
| Harrogate | 120 | 21,428 | 178 |
| Bradford | 2,161 | 363,373 | 168 |
| Huddersfield | 470 | 127,954 | 272 |
| Halifax | 432 | 109,714 | 253 |
| **North Western Province:** | | | |
| Liverpool | 6,040 | 720,057 | 119 |
| Birkenhead | 852 | 111,641 | 131 |
| Manchester | 3,645 | 537,877 | 147 |
| Blackburn | 978 | 239,935 | 244 |
| Burnley | 404 | 145,742 | 360 |
| Preston | 333 | 111,685 | 335 |
| Lancaster | 243 | 37,514 | 154 |
| Blackpool | 172 | 40,364 | 438 |
| Oldham | 463 | 153,625 | 331 |
| Ashton | 244 | 93,549 | 383 |
| Stockport | 224 | 124,178 | 518 |
| Bolton | 477 | 196,151 | 411 |
| Bury | 186 | 93,953 | 505 |
| Rochdale | 280 | 105,464 | 376 |
| Bacup | 130 | 71,230 | 547 |
| Warrington | 218 | 102,804 | 471 |
| Wigan | 332 | 146,425 | 441 |
| Southport | 161 | 54,331 | 337 |
| Whitehaven | 387 | 173,643 | 448 |
| Chester | 459 | 136,107 | 296 |
| **Isle of Man.** | | | |
| Douglas | 241 | 19,525 | 81 |
| **Midland Province:** | | | |
| Birmingham | 2,213 | 594,127 | 268 |
| Wolverhampton | 520 | 292,727 | 562 |
| Coventry | 344 | 103,137 | 299 |
| Kidderminster | 184 | 67,711 | 368 |
| Hanley | 719 | 219,633 | 305 |
| Derby | 423 | 150,613 | 356 |
| Nottingham | 1,113 | 284,326 | 255 |
| Leicester | 589 | 184,262 | 312 |
| Northampton | 217 | 102,977 | 474 |
| Lincoln | 113 | 55,863 | 494 |
| Sheffield | 2,757 | 485,472 | 176 |
| **Southern Province:** | | | |
| Norwich | 414 | 173,651 | 419 |
| Ipswich | 227 | 91,919 | 404 |
| Cambridge | 369 | 85,074 | 230 |
| Reading | 555 | 102,730 | 185 |
| Oxford | 122 | 45,742 | 374 |
| Watford | 93 | 16,826 | 180 |
| Brighton | 1,126 | 151,824 | 134 |
| Hastings | 422 | 87,192 | 206 |
| Canterbury | 147 | 75,925 | 516 |
| Margate | 172 | 48,384 | 281 |
| Dover | 262 | 74,801 | 285 |
| Tunbridge Wells | 178 | 43,430 | 244 |
| Chatham | 213 | 63,802 | 299 |
| Southampton | 351 | 84,398 | 240 |

ENGLAND AND WALES—*continued.*

| Centres. | Number of Lines. | Population. | Population per Line. |
|---|---|---|---|
| Southern Province—*continued.* | | | |
| Bournemouth | 527 | 71,029 | 132 |
| Portsmouth | 427 | 192,617 | 451 |
| Plymouth | 512 | 140,833 | 275 |
| Torquay | 387 | 67,694 | 174 |
| Exeter | 256 | 45,501 | 177 |
| Cardiff | 780 | 293,114 | 375 |
| Swansea | 384 | 131,177 | 341 |
| Newport | 334 | 63,927 | 191 |
| Bristol | 1,418 | 367,825 | 259 |
| Cheltenham | 430 | 87,627 | 203 |
| London | 10,848 | 5,633,806 | 519 |
| Total | 57,358 | 16,632,254 | 290 |

SUMMARY.

| Centres. | Number of Lines. | Population. | Population per Line. |
|---|---|---|---|
| Scotland | 12,661 | 1,607,775 | 127 |
| England and Wales | 57,358 | 16,632,254 | 290 |
| Ireland | 3,319 | 810,469 | 244 |
| Total | 73,338 | 19,050,498 | 260 |

THE NATIONAL TELEPHONE COMPANY, LIMITED.

STATEMENT showing the Number of Subscribers on the Metropolitan Exchanges having a limited Local Service, and the Number of Subscribers on the same Exchanges having full Metropolitan Service.

| | Number of Subscribers to Local Service at £10 per Annum. | Number of Subscribers in same Exchanges having full Metropolitan Service. |
|---|---|---|
| Croydon (the Local Service includes free speaking between Sydenham, Bromley, Redhill, Epsom, and Streatham) | 61 | 250 |
| Kensington | 3 | 342 |
| Kingston (including Richmond and Wimbledon) | 2 | 36 |
| Battersea | 1 | 67 |
| Eastern | 3 | 279 |
| Total | 70 | 974 |

Number of Private Houses connected in the Metropolis - - 492

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

COMPARATIVE STATEMENT of the NATIONAL TELEPHONE COMPANY'S and the POST OFFICE SUBSCRIBERS' LINES.

| NAME OF EXCHANGE. | NATIONAL TELEPHONE COMPANY. | | | POST OFFICE. | | |
|---|---|---|---|---|---|---|
| | Date of Opening. | Number of Subscribers at Opening. | Number of Subscribers at 31st December 1894. | Date of Opening. | Number of Subscribers at Opening. | Number of Subscribers at present Date. |
| Aberdare | — | — | 9 | — | — | 5 |
| Merthyr | — | — | 8 | — | — | 3 |
| Alexandra Dock, Newport | — | — | 271 | — | — | 85 |
| Barry Dock, Cardiff | — | — | 607 | — | — | 155 |
| Briton Ferry | — | — | 41 | — | — | 3 |
| Ebbu Vale, Pontypool, Talymain | — | — | 18 | — | — | 18 |
| Swansea | — | — | 262 | — | — | 7 |
| Hinckley | — | — | 15 | — | — | 3 |
| Leicester | Mar. - 1891 | 80 | 524 | — 1885 | 138 | 38 |
| Loughborough | July - 1885 | 9 | 20 | July - 1887 | 3 | 5 |
| Nottingham | June - 1881 | — | 918 | — | — | 8 |
| Derby | June - 1889 | 38 | 387 | — | 20 | — |
| Workington | May - 1885 | 3 | 40 | May - 1885 | 19 | 6 |
| Hull | Jan. 1st 1891 | 32 | 713 | June - 1881 | — | 52 |
| Blyth | May - 1887 | 4 | 14 | Sept. - 1890 | 2 | 5 |
| Middlesboro' | Jan. - 1886 | 17 | 347 | April - 1887 | 34 | 32 |
| Stockton | Mar. - 1886 | 5 | 119 | Oct. - 1889 | 20 | 19 |
| Morpeth | — | — | 5 | — | — | 7 |
| Newcastle | Sept. - 1885 | 23 | 1,117 | Jan. - 1884 | 414 | 617 |
| Durham | Sept. - 1886 | 5 | 200 | Nov. - 1891 | 1 | — |
| North Shields | Sept. - 1885 | 6 | 79 | Jan. - 1884 | 14 | 28 |
| Tynemouth | — | — | 11 | — | — | 2 |
| South Shields | Sept. - 1885 | 23 | 188 | Jan. - 1884 | 12 | 6 |
| Jarrow | April - 1890 | 17 | 32 | Oct. - 1889 | 4 | 14 |
| *Tyne Dock | Sept. - 1885 | — | — | Jan. - 1884 | — | — |
| Sunderland | Jan. - 1882 | 99 | 746 | Nov. - 1884 | 54 | 48 |
| Blaydon | Dec. - 1889 | 5 | 19 | Dec. - 1890 | 1 | — |
| Hartlepools | Jan. - 1886 | 19 | 330 | April - 1887 | 28 | 22 |
| Cork | — | — | 370 | — | — | 10 |
| Limerick | — | — | 125 | — | — | 4 |
| Londonderry | April - 1890 | 60 | 101 | — | 13 | — |

## THE NATIONAL TELEPHONE COMPANY, LIMITED,

STATEMENT as to Relations between the COMPANY and the ASSOCIATION for the Protection of Telephone Subscribers in *London*.

AFTER the decision had been arrived at that the proposals of the New Telephone Company for working a separate Telephone system in London under the conditions set forth in the agreement between the New Telephone Company and the Association for the Protection of Telephone Subscribers, dated 25th April, 1892, could not, with advantage to the public, or with any prospect of financial success to the New Telephone Company, be given effect to, and that in the interests of all parties concerned it was expedient, in order to secure a more efficient service than then existed, to remodel the plant of the National Telephone Company on the metallic circuit principle, negotiations took place between the representatives of the Association and of the National Telephone Company, with the result, that certain assurances which were given by the National Telephone Company, accompanied by certain modifications of tariff, were accepted by the Association as a fulfilment of the obligations of the New Telephone Company to the Association, as set forth in the said agreement.

The Assurances referred to were, that the National Telephone Company would continue the work, then in progress, of remodelling its London system upon the metallic circuit principle, and that work has been pushed forward with the utmost vigour, in redemption of the pledges given upon the conclusion of these arrangements.

The following letter, signed by the representatives of the Association, was sent to the London Press, and appeared in the "Times" of the 20th March, 1893 :—

To the Editor of the "Times."

Sir,

WE hope that you will allow us to inform the telephone users of London through the medium of your journal that, as the direct result of the pressure brought to bear upon the National Telephone Company by the Association for the Protection of Telephone Subscribers, the prices of private-house telephones in London, giving communication over the whole metropolitan area, will be almost immediately reduced from 20*l.* a year to 10*l.* a year, subject only to the condition that they are taken upon a five years' contract. The price of business telephones will remain as at present, but since the National Company have promised immediately to instal the twin-wire system, which will make speaking on the telephone clear and easy, the chief objection to entering upon five years' contracts for business telephones and taking the discount of 3*l.* per annum then allowed vanishes. Had the New Telephone Company continued to have an independent existence, our Association had great hopes of obtaining an even better telephone service than has now been secured to users; but, on the other hand, it must be remembered that these benefits would have been seriously discounted by the fact that it would have been two or three years before the New Telephone Company would have been in full working order, while the present advantages will be secured immediately.

Yours, &c.,
(signed) *C. R. Haig.*
*A. H. Hastie.*

65, Lincoln's-inn Fields, W.C., 17 March.

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

STATEMENT regarding NEW and CEASED SUBSCRIBERS, SPARE WIRE, &c., Year ending 31st December, 1894.

### UNITED KINGDOM (INCLUDING THE METROPOLIS).

| | |
|---|---|
| Number of New Subscribers to the Company's system during the year ending 31st December 1894 | 12,502 |
| Number of Subscribers Ceased during year ending 31st December 1894 | 4,410 |

### METROPOLIS.

| | |
|---|---|
| Number of New Subscribers during the year ending 31st December 1894 | 1,596 |
| Number of Subscribers Ceased during year ending 31st December 1894 | 806 |
| Mileage of spare wire at 31st December 1894 | 548 miles 63 yards |
| Mileage of spare wire erected in anticipation of new business during year ending 31st December 1894 | 842 miles 332 yards |
| Mileage of wire thrown spare by ceased Subscribers or removals during year ending 31st December 1894 | 779 miles 1,611 yards |

## THE NATIONAL TELEPHONE COMPANY, LIMITED.

COMPARATIVE STATISTICS relating to DUNDEE TELEPHONE COMPANY.

| | |
|---|---|
| 1. Date when National Company's Exchange was opened in Dundee | About July, 1881 |
| 2. Date when Dundee Company opened | About June, 1880 |
| 3. Number of Subscribers to the National Company at opening | 14 |
| 4. Number of Subscribers to the Dundee Company at date of purchase | 332 |
| 5. Number of Dundee Company's Subscribers at the date when the National Company commenced | 165 |
| 6. Number of National Company's Subscribers in Dundee at date of purchase | 642 |
| 7. Number of Dundee Company's Subscribers who gave up the Dundee Company to join National | None, so far as is known |
| 8. Number of National Company's Subscribers who were also Dundee Company's Subscribers, at date of purchase | 152 |

9. Analysis of rates paid by Dundee Company's subscribers at date of purchase :—

| £. | s. | d. | |
|---|---|---|---|
| 1 at | 2 | 10 | – |
| 2 at | 3 | – | – |
| 9 at | 4 | 10 | – |
| 3 at | 4 | 13 | 4 |
| 35 at | 5 | – | – |
| 253 at | 5 | 10 | – |
| 4 at | 5 | 15 | – |
| 1 at | 6 | 10 | – |
| 1 at | 8 | 15 | – |
| 1 at | 17 | 10 | – |
| 310 | | | |
| 22 | | | Service and free |
| 332 | | | |

*Note.*—These figures do not coincide with those stated in evidence by Sir John Leng, M.P.

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[*N.B.*—In this Index the Figures following the Names of the Witnesses, and those in the Analysis of Evidence of each Witness, refer to the Questions in the Evidence; the Figures following App. refer to the Pages in the Appendix; and the Numerals following *Rep.* to the Pages in the Report and Proceedings of the Committee.]

## A.

*ABERDEEN.* Explanation that at Aberdeen the municipal subscription to the telephone amounts to 200*l.*; *Bisset* 1020–1022——Experience to the effect that the telephone service is very bad, *ib.* 1023. 1041–1043.

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*Association for the Protection of Telephone Subscribers.* Statement as to the relations between the National Company and the Association for the Protection of Telephone Subscribers in London, *App.* 328.

*Austria.* Paper containing information respecting the telephone service, the system in operation, number of subscribers, terms of subscription, trunk-wire charges, &c., *App.* 296, 297.

B.

*Bates, H. Montague.* (Analysis of his Evidence.)—Is principal clerk to the Commissioners of Sewers of the City of London; has had eleven years experience of the working of telephones, 1952–1955.

Statement in regard to the unsatisfactory nature of the present service; belief that it is largely due to the use of the single wire system, 1956–1967——Reference to an application made to the Commissioners of Sewers for their consent to apply for a licence to establish a double-wire service at a charge of 8*l.* per user per annum; resolution of the Commissioners, provided this charge could be guaranteed, to consent to certain tubes laid by the City of London Electric Lighting Company being used for telephonic purposes, 1968–1974. 1977–1996.

*Belgium.* Return respecting the telephone service, the number of subscribers and terms of subscription, trunk-wire charges, &c., *App.* 296, 297.

*Bell's Patent.* Establishment of a company in 1878 for the purpose of acquiring and working Bell's patent: subsequent amalgamation of this company with the Edison Company as "The United Telephone Company," *Lamb* 9–13——Explanation as regards the Bell Company that there was at first no suggestion of an exchange system, *ib.* 9.

*Berridge, George.* (Analysis of his Evidence.)—Witness is Chairman of the Streets Committee of the Commissioners of Sewers of the City of London, 1997–2000. 2039, 2040.

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Information respecting the system and charges of the New Telephone Company, 2055–2060——Explanations in regard to the day and night population of the area over which the Commissioners of Sewers have authority, 2067–2074——Personal opinion that the Commissioners would not grant the London County Council control over their streets, 2097–2100.

*Beveridge, William.* (Analysis of his Evidence.)—Statement on the part of the Corporation of Glasgow that the result of an inquiry in regard to the efficiency or inefficiency of the present service was about 970 expressions of dissatisfaction out of 4,409, the total number of subscribers, 5140–5157.

*Binnie, Alexander B.* Summary of report by Mr. Binnie, together with estimate, as to the cost of supplying London with a telephone service and as to the annual expenditure in maintenance, *App.* 303, 304.

*Bisset, George.* (Analysis of his Evidence.)—Is City Treasurer of Aberdeen and Chairman of the Finance Committee of the Town Council, 1017–1019.

Statement that the municipal subscription to the telephone amounts to 200*l.*; 1020–1022——Experience that the telephone service is very bad, 1023. 1041–1043——Evidence respecting the number of subscribers and the charges of the National Telephone Company; the reduced rental of 8*l.* 10*s.* caused a great increase in the number of subscribers, 1024-1027. 1079–1081.

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*Bisset, George.* (Analysis of his Evidence)—*continued.*

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*Buffalo* (*United States*). Reference to a toll instituted at Buffalo in place of an annual subscription, *Preece* 2691. 2721–2727.

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*Calls and Call Offices.* Desirability of the telephone system being brought more within the reach of people who at present cannot afford it, by the establishment of a number of call offices where the telephone could be used for a small fee; conclusion hereon that very considerable benefits would accrue to the public under the agreements made by the Postmaster General, *Clare* 1187-1193. 1202–1211. 1252–1259. 1360–1363 —— Particulars of the "Law" system of calling now in operation at Glasgow; belief that it may be a cause of difficulty, *Preece* 2571–2575.

Total of 139,639,032 as the present ratio of effective calls per annum, *Forbes* 4205.

*See* also *Exchanges. Messages.*

*Capital of Companies.* See *Cost* (*Capital Outlay*).

*Carbutt, Sir Edward H.* (Analysis of his Evidence.)—Is a Member of the Council of the London Chamber of Commerce, and appears in support of the resolutions passed by a special committee of that Chamber; names of the members of the Chamber who formed the committee, 1786–1791. 1840–1846.

Necessity for properly controlled competition, 1791. 1847–1849. 1856–1858—— Grounds for desiring that small areas should be formed, and that the charges should vary according to the character of the area; reference hereon to experiments made at Kensington and Croydon in regard to varying rates, 1791–1794. 1832–1838. 1859-1861. 1890-1895.

Belief that it would prove advantageous to start numerous small companies in agricultural districts under similar powers to those applied for in the Light Railways Bill, 1794–1799. 1826–1831. 1871–1874——Suggestion that the London system should be purchased by the Government, 1799, 1800. 1874–1876——Desirability of having standard regulations which should be applicable to all towns, 1800–1804.

Necessity for precautions being taken against the possible neglect of unprofitable areas; opinion that this could be controlled by the Postmaster General when granting licenses, 1804–1825. 1850–1856 —— Personal opinion that were the London County Council to supply the profitable area of Central London they would also have to include the unprofitable fringe around it, even though it entailed an increased charge to subscribers, 1862–1870. 1879-1884.

Question as to the difficulties in regard to inter-communication between different systems which would arise in the event of competition, 1896–1907——Examination upon the question whether new companies would not be handicapped in their competition with the National Telephone Company if they were compelled to include unprofitable areas in their system; belief that the benefits accruing from a smaller capital would compensate for any such disadvantage, 1908–1918.

*Charges to Subscribers.* See *Rates and Charges.*

*Chicago.* Belief that the first establishment of a telephone exchange was at Chicago in 1878; *Lamb* 9, 10 —— Particulars respecting the enormous use made of the telephone in Chicago, *Preece* 2634-2645. 2680, 2681.

*Chisholm, Samuel.* (Analysis of his Evidence.)—Has been in business in Glasgow for many years; is a Magistrate of the City and a Member of the Glasgow Town Council, 411-413.

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*Chisholm, Samuel.* (Analysis of his Evidence)—*continued.*

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Information showing that threatened competition caused the National Telephone subscription, which was formerly 20*l.* per annum, to be reduced, to 10*l.*, and that this reduction has nearly trebled the number of subscribers, 449–461. 514–517. 576–584. 587–589——Result of inquiries in regard to the much smaller charges that prevail in continental cities, notably Stockholm, 462, 463. 565–575.

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*Chronology of the Telephone.* Paper explanatory of telephone chronology in this country since the time of the Bell & Edison patents, *App.* 316.

*Circuits.* Description of the instruments necessary to make a complete telephone circuit, *Preece* 2557——Variation in regard to the number of lines that can be undertaken by one operator; five circuits a fair average for a busy trunk line, *ib.* 2685, 2686.

*See* also *Metallic Circuits.*

*Clare, Harcourt Everard.* (Analysis of his Evidence.)—Witness is Deputy Town Clerk of Liverpool, and has had the control of the Parliamentary business of the Liverpool Corporation for the last fourteen years; appears, with the town clerk of Leeds, on behalf of the Municipal Corporations Association, 1145–1148. 1212.

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Anticipation that if the Government take over the whole system a considerable reduction in the charges might be made by working it at something like cost price, and that developments would take place, in the interests of the public, that might not pay at once, 1152, 1153——Doubt as to any public benefit arising from the Government taking over the trunk wire system only, unless the number of trunk lines be increased, 1153-1155.

Evidence in support of the conclusion that if the whole system be not taken over by the Government all the local exchanges should be under one control, otherwise there would be confusion and extra charges, 1155–1157. 1208–1210. 1283–1299. 1352–1355. 1463 *et seq.*——Conclusions of the Municipal Corporations Association that the idea of municipalising the local exchanges is impracticable and wrong in principle; undesirability

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undesirability of the rates being pledged for carrying on a business undertaking which must result in a loss, and which is not used by the large majority of ratepayers, 1157–1167. 1260–1299. 1304 *et seq.*; 1408 *et seq.*; 1424–1443. 1460 *et seq.*

Impossibility of any other company successfully competing with the National Telephone Company; probability that any such attempt at competition would only result in increased charges, 1158, 1159. 1242–1255——Inclusion in the Municipal Corporations Association of practically all the corporations in England outside London, 1163–1167.

General satisfaction with the telephone system in the Liverpool area; conviction, however, that telephones will never be as cheap or efficient as they ought to be while the telephone company is not endowed with the powers necessary to maintain their undertaking in a proper way over private property, 1168 *et seq.*; 1306 *et seq.*——Desirability, in the event of the telephone company being given compulsory powers to maintain their works, of the corporation having absolute discretion as to whether the system shall be an overhead or underground one, 1168 *et seq.*

Necessity of an Act of Parliament empowering corporations to break up the streets for the purpose of putting down underground telephone wires; practical agreement of all the corporations to withhold their consent to the exercise of way-leave powers under the Act of 1892; 1172–1179. 1300–1303. 1348–1352. 1401 *et seq.*——Suggestion that, after having fixed the powers to be given to the telephone company, the fair maximum dividend that the company may pay on their capital, and the maximum charges in conjunction with maximum dividends, should be considered, 1180–1187. 1197–1201.

Advisability of provisions to prevent the company unfairly favouring one exchange area at the expense of others, and of giving undue preference as between one subscriber and another, 1180–1187——Possibility of classifying the different local exchange areas and fixing the maximum charge in each class, 1185, 1186. 1467.

Desirability of the telephone system being brought more within the reach of people who at present cannot afford it, by the establishment of a number of call offices where the telephone could be used for a small fee; conclusion hereon that very considerable benefits will accrue to the public under the agreement made by the Postmaster General, 1187–1193. 1202–1211. 1252–1259. 1360–1363——Grounds for the contention that the telephone company, or the authority controlling the telephone system, should be given a permanent existence, with extended powers to maintain the undertaking on a cheap and efficient basis, 1194–1221. 1235–1241.

Opinion that the only alternative to buying out the companies, which course is not recommended, is to leave the present supply of telephonic convenience in the hands of the National Telephone Company, but under altered conditions, 1213–1221.

Evidence to the effect that the telephone is doing a great deal of the work that would otherwise have been done by the telegraph, the telegraph business between Liverpool and Manchester having been practically ousted by the telephone, 1231, 1232.

No doubt that part of the net loss of 240,000*l.* a-year incurred by the Post Office on the telegraph business is due to the competition of the telephones; contention, however, that part of the loss is also due to press messages being carried at a lower rate than other telegrams, 1306 *et seq.*; 1430, 1431——Grounds of objection to the proposal that the municipalities should compete with the National Telephone Company, such a course involving the duplication of wires throughout the area; probability that the lower prices produced by the competition would not be maintained very long, 1307 *et seq.*; 1368 *et seq.*

Suggestion that if an arrangement be made empowering the Postmaster General to take over the telephone system from the National Company when he thought fit to do so, some reasonable method of arriving at the price should be specified in the Act, 1339-1347. 1432——Practical concurrence of witness in the proposed agreement with the Postmaster General, except as regards that part which relates to breaking up the streets; objection to the Postmaster General throwing on the corporations the necessity of protecting the public against his own licensees, 1364 *et seq.*

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Opinion that the additional facilities for telephonic communication that the Postmaster General proposes to give if the agreement be carried out will undoubtedly be a benefit to the public; great convenience of the arrangement by which telegrams can be telephoned at some post offices, 1451–1457—— Non-objection to competition being allowed in Scotch areas if the corporations demand it, provided the result be not detrimental to telephone subscribers in Liverpool; belief, however, that such competition would be detrimental to the whole country, 1468–1472.

Statement that so far as witness is aware no English corporation has asked for, or desires to have, a telephone licence, 1473——Belief that the Municipal Corporations Association would endorse the opinion expressed by witness that no powers should be conferred on corporations to construct telephones, 1474–1479.

*Colquhoun, James, LL.D.* (Analysis of his Evidence.)—Is a Solicitor at Glasgow, a Member of the Town Council, and a Police Court Judge, 682–684.

Statement respecting the general dissatisfaction in Glasgow at the inefficiency of the telephone service, 686–689. 824–835——Particulars as to the original telephone services in Glasgow, 690–697. 701–703——Examination in regard to the charges of the National Telephone Company; belief that the present reduced charge of 10*l.* per annum was the result of threatened competition, 697–700. 704–710. 759–761—— Opinion that competition would be advantageous, 710, 711. 877–880.

Difficulty between the corporation and the National Telephone Company respecting the institution of electric trams, 712–716. 836–841——Advantageous financial position of the Corporation, 717–719. 764–768——Grounds for the opinion that the telephone service should be in the hands of either the State or of the municipalities, 721. 769–775. 815. 822, 823. 868, 869——Necessity, in the case of the telephones being the monopoly of a private company, that there should be conditions as to price, &c., 721. 754–757. 812–814.

Willingness of the corporation to enter into competition with the National Company, and also to work amicably with them, 722–729. 847–853——Contention that the Postmaster General should be entitled to take over the telephones from municipalities at a fair value without any payment for goodwill, 731–733. 883, 884. 887–889—— Detailed evidence as to the powers of the Postmaster General and his licensees in respect of wayleaves, 734–753. 845, 846. 856–863——Estimate by Mr. Provand that a rental of 5*l.* per annum would repay the corporation, 762. 842–844.

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*COMPETITION:*

Grounds for the conclusion that competing systems in one area invariably become absorbed one in the other and result in inconvenience and expense to the public; illustrations in the case of competing companies in Stockholm and Dundee, *Lamb* 104–114. 192, 193. 275. 279–286. 314–319. 359, 360——Statement that there is nothing in the agreement with the companies which would restrict the power of the Postmaster General to grant competing licences, *Sir R. Hunter* 400–406. 410.

Reference to the distinct statement of the Treasury Minute in favour of competition, *Chisholm* 637–641——Opinion that the Treasury Minute is suggestive of competition, *Colquhoun* 802.

Impossibility of any other company successfully competing with the National Telephone Company; probability that any such attempt at competition would only result in increased charges, *Clare* 1158, 1159. 1242–1255——Grounds of objection to the proposal that the municipalities should compete with the National Company, such a course involving the duplication of wires throughout the area; probability that the lower prices produced by the competition would not be maintained very long, *ib.* 1307 *et seq.*; 1368 *et seq.*——Non-objection to competition being allowed in Scotch areas if the corporations demand it, provided the result be not detrimental to telephone subscribers in Liverpool;

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Liverpool; belief, however, that such competition would be detrimental to the whole country, *Clare* 1468–1472.

Grounds for the opinion that competition on the part of municipalities would only be justifiable in the event of the State not taking over the whole telephone system and in the absence of such conditions as would compel the existing company to give a better service at revised rates, *Harrison* 1483–1491. 1531–1541. 1559–1561. 1575 *et seq.* ——Suggestion that a thorough competition such as that of a municipality would reduce the charges and enable the Government to take over the telephones at a reasonable sum, *Dickinson* 1625–1628. 1647–1652. 1677–1680. 1684–1690. 1773–1775.

Necessity in London for properly controlled competition, *Carbutt* 1791. 1847–1849. 1856–1858——Question as to the difficulties in regard to inter-communication between different systems which would arise in the event of competition, *ib.* 1896–1907—— Examination as to whether new companies would not be handicapped in their competition with the National Telephone Company if they were compelled to include unprofitable areas in their system; belief that the benefits accruing from a smaller capital would compensate for any such disadvantage, *ib.* 1908–1918.

Examination as to the difficulties of inter-communication in the event of competition between two systems; they have not been discussed by the Committee of the London Chamber, *Flood-Page* 1940–1947——Opinion that competing systems would not prove very inconvenient, *Berridge* 2032, 2033. 2062–2066. 2090–2096. 2101–2103.

Strong opinion against competition, *Riach* 2267, 2268; *Crombie* 2402–2404. 2411–2419——Disapproval of competition except as a means of reducing an extravagant price, *Moncur* 2314. 2350.

Belief that competing systems in one area would necessitate an increase of exchange and consequently increased delay, *Preece* 2675–2680——Opinion that inter-communication between competing systems would not cause engineering difficulties, *ib.* 3003–3006 ——Conclusion as to the impracticability of competition in any form, *ib.* 3055. 3135, 3136.

Grounds for the suggestion that limited competition would prove a great stimulus to invention, as it has done in the case of electric light, and that when telephony arrives at a more perfect condition the whole system might pass into the hands of the State, *Crompton* 3193–3209. 3216–3221. 3229–3231. 3243–3258.

Belief that limited competition would bring about a more effective service, but that the simplest solution would be the nationalisation of all telephones, *Thompson* 3279–3283. 3296——Further opinion that municipal telephones would be the best form of competition, *ib.* 3332–3342. 3390–3392——Suggestion that in the case of competing exchanges, the work might be simplified by having a directory inclusive of the names of subscribers to all companies, *ib.* 3394–3401.

Examination as to the efforts made on the expiration of the patent rights in 1890, to bring about competition, the Pioneer Telephone Company having been formed in 1892 with the object of raising capital for a projected company, to be called the New Telephone Company, *Webber* 3424–3428——Opinion that both town and county councils are perfectly competent to undertake the telephone service, but that competition in any form is necessary in default of purchase by the State, *ib.* 3584–3592. 3618. 3824. 3868–3873. 3957–3973——Denial that reasonable competition has ever existed, *ib.* 3961–3963.

Belief that under the agreement of the Post Office authorities in this country are absolutely free to grant competing licenses, *Forbes* 4640–4644——Question as to what would be the action of the National Company if the Post Office were to grant competing license to new companies or to municipalities, *ib.* 4680–4691——Belief that competition reduces rates temporarily only, and probably ends in making them heavier than they were originally, *ib.* 4899–4902.

Instances given of a case in which the threatened competition of the Post Office effected a satisfactory service, *Lamb* 5209–5212. 5231–5241. 5278, 5279——Grounds for the contention that competition should not be allowed, and that the telephone system should be in the hands of the Post Office, *ib.* 5254–5259. 5268–5283. 5289–5291.

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*Cost (Capital Outlay):*

Estimates given by three gentlemen to the effect that the best telephonic system could be provided for the County of London for 10,000 subscribers, at a subscription not exceeding 10*l.* per annum, *Dickinson* 1612–1622. 1634–1644. 1674–1676. 1726–1738. 1781–1784.

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Estimate that an underground system for London would average 55*l.* per subscriber, *Preece* 2715, 2716——Admission that if a company started with unwatered stock, it would benefit subscribers, *ib.* 2933–2947. 2982-3002. 3007–3012——Evidence showing that with a multiple board the capital cost increases as the square of the number of subscribers, *ib.* 2933–2947. 2982–3002. 3007–3012——Admission that if a company started with unwatered stock subscribers would benefit, *ib.* 3013–3016.

Evidence showing that a complete twin-wire underground service could be provided for 28,000 subscribers at a capital outlry of 14*l.* 2*s.* 6*d.* each, *Webber* 3464–3472. 3624, 3625. 3652–3661. 3751–3754. 3836–3839. 3928–3936.

Comparison of an estimate proposed by the New Telephone Company (and signed by witness) with that put forward by the London County Council; explanation that the estimate signed by witness proved on examination to be illusory, *Forbes* 4481–4494. 4499–4527——Information as to the capital of the various companies now amalgamated under the National Telephone Company, and the sum paid for their purchase, showing an amount of 1,229,000*l.* "watered" capital, *ib.* 4781–4790.

Examination as to whether the sum of 700,000*l.* invested in the purchase of the New Company is not unproductive capital; justification of the transaction, *Forbes* 4839–4867——Question raised as to whether the expenditure of the National Telephone Company does not coincide with the estimate given in the prospectus of the New Telephone Company; belief that such an estimate could not be realised, *ib.* 4903–4934——Evidence showing that there was no watering of capital when the United and the Bell and Edison Companies amalgamated, *ib.* 5106–5109. 5112——Inaccuracy of a table put in by Mr. Benn respecting Mr. Burdett's view of the capital of the National Company; under-statement of the number of subscribers, *ib.* 5112–5114.

Consideration of the wide divergency between the several estimates that have been suggested for an efficient telephone system; belief that the estimate of a 16*l.* subscription is not too low, *Lamb* 5189–5208. 5225. 5227–5230. 5254, 5255.

*Cost of Working.* Statement that the expenses of administration increase enormously with the number of subscribers, *Lamb* 209. 369–374——Examination as to the increase of charge under the new arrangement with the National Company; comparison of the company's scale, and that of the Post Office, *ib.* 235–249.

Information as to the circumstances which cause an increase of cost; opinion that the number of operators attendant on an increased number of subscribers is the basis of cost, but that it is also affected by local circumstances, *Preece* 2687–2708.

Evidence respecting the salaries of the telephone clerks, superintendents, and wiremen; opinion that the cost of skilled labour is at least thirty-three per cent. higher than in most European countries, *Forbes* 4645–4655——Experience that in any given area after a certain point, an increase in the number of subscribers necessitates increased expense; statement to be prepared showing the manner in which the extra expense is incurred, *ib.* 4953–4955. 5063–5068. 5077–5085——Further information in regard to the working expenses of the company and the profit realised, *ib.* 5042–5051.

*Crombie, James.* (Analysis of his Evidence.)—Has carried on the business of a merchant and shipowner in Aberdeen for nearly fifty years; is agent of Messrs. Langlands, shipowners of Glasgow, &c., 2378–2381. 2410.

Personal experience that the service of the National Telephone Company is very efficient, 2382–2389. 2394–2399——Reference to the difficulties of the National Telephone Company in regard to wayleaves, 2389–2393——Evidence showing that the charge to subscribers in Aberdeen has been reduced from 15*l.* to 8*l.* 10*s.*; 2400–2402. 2407–2409.

Strong opinion against competition, 2402–2404. 2411–2419——Explanation that witness does not agree with certain evidence given by Mr. Bisset, 2405, 2406. 2422–2426——Belief that if a change be necessary nationalisation would be preferable to municipilisation, 2407.

*Crompton, R. E.* (Analysis of his Evidence.)—Is President of the Institute of Electrical Engineers; represents the Institute with regard to the telephone question, 3187, 3188. 3225.

Belief that the existing telephone monopoly has deadened the interest of the electrical profession in England, 3191–3193. 3226–3228. 3243. 3266–3269——Grounds for the suggestion that limited competition would prove a great stimulus to invention, as it has done in the case of electric light, and that when telephony arrives at a more perfect condition the whole system might pass into hands of the State, 3193–3209. 3216–3221. 3229–3231. 3243-3258.

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*Crompton, R. E.* (Analysis of his Evidence)—*continued*.

Examination in support of the opinion that England compares unfavourably with other countries in the absence of telephonic service amongst the poorer classes in villages and towns; practicability of intelligent young men starting small local exchanges, 3209-3215. 3222-3224. 3230-3242. 3259-3265.

*Curves.* Copies of curves handed in, showing how unequally the work is spread over the different hours of the day, *Preece* 2650–2666. 2670, 2671.

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*Deferred Messages.* Proposal that smaller charges might be made for deferred messages sent over the trunk wires at certain less busy hours of the day, *Webber* 3626–3632.

*Delay.* Evidence showing that the great delay occasioned by the number of operations necessitated when two or more exchanges are involved is partially removed when subscribers are in direct communication with the Post Office, *Preece* 2763–2768. 3112–3130. 3137–3149——Conclusion that a multiplicity of exchanges causes delay in transmission, *Forbes* 4460, 4461. 4636–4639.

Statement of the number of local messages passing through the exchanges at Glasgow, Aberdeen, Edinburgh, and at Queen Victoria-street Exchange (London) on 3rd April 1895, showing the time occupied and the reasons for delay in making connections, *App.* 323.

*Dickinson, Willoughby Hyett.* (Analysis of his Evidence.)—Witness, as Deputy Chairman of the London County Council, explains the action taken by the Council in regard to the telephone service in London; unsuccessful attempt of the Council to stop the Telegraph Bill of 1892, after the withdrawal of the Telephone Bill, which they had petitioned against, 1593–1596.

Opinion of the Committee of the Council that the agreement between the Post Office and the National Telephone Company places the company in too strong a position, giving it a practical monopoly over the whole kingdom, to the very great prejudice of the public, 1596.

[Second examination.]—Further evidence showing the grounds upon which the London County Council conclude that the Agreement will materially strengthen the position of the Telephone Company, 1597, 1598——Belief that the Council have no veto in regard to the connection of exchanges, 1598-1601——Tendency of the Agreement to increase the charges for messages on trunk wires; cases illustrative of those charges, 1601, 1602.

Objections to the clause of the Agreement which deals with terminal charges, 1602–1606. 1629–1633. 1653–1662. 1739–1749——Detailed information to the effect that the telephone system of London is unsatisfactory and that the charges are far in excess of those of Continental cities, 1606–1612. 1702–1711. 1750–1760.

Estimates given by three gentlemen showing that the best telephonic system could be provided for the county of London for 10,000 subscribers at a subscription not exceeding 10*l*. per annum, 1612–1622. 1634–1644. 1674–1676. 1726–1738. 1781–1784.

Full particulars showing that the high charges of the Telephone Company are due to its very large capital, the result of the process of amalgamation, 1623-1625.

Suggestion that a thorough competition such as that of a municipality would reduce the charges and enable the Government to take over the telephones at a reasonable sum, 1625–1628. 1647–1652. 1677–1680. 1684–1690. 1773–1775——Inexpediency of conferring any greater powers on the National Company, 1645, 1646 —— Personal opinion of witness that the telephones for the County of London should be in the hands of the London County Council, 1655–1673. 1681–1684.

Examination as to the increased expense of a large area; view of witness that the system for London need not be complicated with the question of area, 1690–1700 —— Desirability of the telephones being in the hands of the Government, 1712–1715. 1772 ——Reference to the three recommendations of the County Council in regard to the telephone service; they were adopted by both the late and the present County Council, 1714, 1715. 1761–1771.

Probability that increased telephonic service in London will prove detrimental to telegraphic communication, 1720–1725——Opinion that were licenses granted to municipalities, they should be for a term of years and not for a permanency, 1772. 1776–1780.

[Third examination.]—Information respecting the result of a circular issued by the London County Council on the 6th of May 1895, and sent to all the subscribers of the National Telephone Company, with the view of ascertaining their opinion as to the

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efficiency of the service; about the same time a circular was issued by the National Telephone Company which has rather complicated the replies received, 4135–4148. 4154–4159.

Examination as to the estimates of the County Council for supplying a telephone service for London at a rental of 10*l.* per subscriber, 4153.

*Double-wire System.* Statement showing for several foreign countries the extent to which the double-wire system is in operation, *App.* 296–299.

*Dow, John Archibald.* (Analysis of his Evidence.)—Is a coal master in Glasgow, and is a partner in the Hamilton Coal Company, 2104–2106.

Evidence showing that for the last eleven years witness has been a constant user of the telephone supplied by the National Telephone Company in Glasgow and has found it satisfactory, 2107–2114. 2123–2129. 2152–2164——Grounds for objecting to the grant of licenses to municipalities; opinion that the telephone should be nationalised rather than municipalised, 2115–2120. 2130–2151——Statement as to the cost of the service in Glasgow, 2121, 2122.

*Draft Report.* Draft Report, as proposed by the Chairman, adopted by the Committee, *Rep.* viii.

*Dundee.* Detailed evidence showing how competition in 1884 reduced the charges from 20*l.* to 5*l.*, and resulted in Dundee being the best telephoned town in the country, *Sir J. Leng* 1097–1110——Comparison of the rate of increase in the number of subscribers in Glasgow and Dundee; explanation that an amalgamation of companies in Dundee brought about an increased rental which for a time caused a reduction in the number of subscribers, *ib.* 1111–1121. 1123–1126.

Considerations of certain difficulties in the case of outlying districts; belief that such districts might eventually be brought within the municipal area, *Sir J. Leng* 1132–1144.

Result of witness' experience that the service of the National Telephone Company at Dundee is very efficient, *Moncur* 2296–2299——Objection to the municipalisation of the telephone service, *ib.* 2300–2302. 2343–2349——Grounds for believing that the present amalgamated service is better than when competition existed, *ib.* 2303–2307. 2333–2343. 2351–2362.

Detailed information as to the effect of the competition of the Dundee and District Telephone Company on the charges of the National Telephone Company, *Moncur* 2308–2313——Evidence respecting the diminution of the dividends paid by the Dundee and District Telephone Company, *ib.* 2315–2321. 2327, 2328. 2363–2371.

Information respecting the result of competition in Dundee; statement to the effect that this competion lowered the charges, but that the Dundee Company built a flimsy structure with a view to ultimate sale, *Forbes* 4692–4711.

Statement of the number of lines and the increase in each of the last five years, *App.* 319.

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Comparative statistics relating to the National Company and the Dundee Company respectively, *App.* 329.

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Statement that the Corporation of Edinburgh is a considerable telephone user, *Sir J. Russell* 895–899——Evidence respecting the number of telephone subscribers and the rentals charged; reduction of the charge to 10*l.* per annum, *ib.* 900–902. 906, 907——Belief that the Edinburgh telephone service, although imperfect, is not so unsatisfactory as that of Glasgow, *ib.* 903–905.

Particulars as to the various controversies that have arisen between the telephone companies and the corporation respecting overhead wires, electric trams, &c., *Sir J. Russell* 905–921. 938. 969–976——Objection of the corporation to any interference with the streets, *ib.* 922–924. 978–980——Resolution of the Edinburgh Committee to apply for a telephone license should one be obtained by Glasgow, *ib.* 925–927. 977.

Evidence in support of the suggestion that Edinburgh and Leith should count as one area, *Sir J. Russell* 933-936. 952-957. 982–991——Statement that no dispute has ever arisen between the Post Office and the corporation in regard to wayleaves, *ib.* 967, 968.

Corroboration generally of the evidence given by Sir James Russell, *Anderson* 1005——Importance attached by the corporation to the control of the streets, *ib.* 1006, 1007

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1007——Conclusion that the municipality, if it obtained a licence, would give up the undertaking to the State on equitable terms, *Anderson* 1009.

Approval of competition in the case of Edinburgh, as between the municipality and the Telephone Company, *Anderson* 1010–1012——Suggestion that the municipal area might include Portobello, Musselburgh, &c., *ib.* 1013–1016.

Information showing that the corporation disapprove of competition, but are willing to purchase the business of the National Telephone Company, *Bisset* 1030. 1035. 1061–1064. 1071–1074. 1082–1085.

Evidence respecting the offices, &c., owned by witness, and the nature of the wires connecting them, *Waldie* 2228–2232——Experience of eighteen years that the system of the National Telephone Company is very satisfactory, *ib.* 2233–2239.

Experience of witness that the service in Edinburgh is very satisfactory, and is yearly improving, *Reach* 2249–2252. 2258–2264. 2288, 2289.

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*Edison Company.* Explanation that the Edison Telephone Company of London was established in 1878, and purposed instituting telephone exchanges, *Lamb* 9, 10——Subsequent amalgamation of the Bell and Edison companies, under the title of "The United Telephone Company," *ib.* 9–13.

*Efficiency of Service.* Bar to the development and greater efficiency of the telephone system through the action of the Post Office for the protection of its revenue, *Webber* 3418——Letters written by the late Duke of Marlborough in 1882 handed in, as exemplifying the inefficiency of the telephone service at that period, *ib.* 3418–3420.

Information respecting the result of a circular issued by the London County Council on the 6th of May 1895, and sent to all the subscribers of the National Telephone Company with the view of ascertaining their opinion as to the efficiency of the service; about the same time a circular was issued by the National Telephone Company, which has rather complicated the replies received, *Dickinson* 4135–4148. 4154–4159.

Examination as to a recent circular issued by the National Company to its subscribers; conclusion that the general tenure of the replies received was favourable to the company as regards the efficiency of the service, *Forbes* 4160. 4162–4174——Return submitted giving the average number of complaints received from different towns in the United Kingdom for the year 1894; *ib.* 4318–4321——Evidence respecting the improvements which are being carried out by the National Company, *ib.* 4935–4942.

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*Electric Tramways.* Objection of the telephone companies, as at Glasgow, to the use of electric traction for trams, *Chisholm* 438, 439——Difficulty between the Corporation of Glasgow and the National Telephone Company respecting the institution of electric trams, *Colquhoun* 712–716. 836–841——Explanation with reference to the objection of the National Company to the introduction of electric tramways in Glasgow, *Forbes* 4993, 4994.

*Engineering Expenses.* Statement that engineering expenses average 3*l.* per subscriber, *Preece* 2709–2714——Reference to the want of encouragement for young men to enter upon the telephone branch of the profession, *Thompson* 3283–3286. 3291–3295. 3311.

*Establishment of Telephones.* Detailed statement respecting the institution and early history of the telephone and its establishment in this country, *Lamb* 4 *et seq.*

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Belief that the first telephone exchange was established at Chicago in 1878; *Lamb* 9——Evidence respecting the successful litigation entered into by the Post Office on account of the proposal to establish exchanges on the part of the Edison Company and of the United Telephone Company, *ib.* 11–13——Permission given by the Postmaster General in 1881 for the connection by the telephone companies of their exchanges with post offices, *ib.* 30, 31.

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*London:*

1. *Question of Administration and Control of the Telephone Service in the Metropolis.*
2. *Schemes and Estimates for an improved and extended System.*
3. *Area.*
4. *Question of Efficiency and of Charges.*
5. *Pipes laid by the Electric Lighting Company.*
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1. *Question of Administration and Control of the Telephone Service in the Metropolis:*

Explanation of the action taken by the London County Council in regard to the telephone service in London; petition of the Council against the Telephone Bill of 1892 (which was withdrawn), whilst the Council did its utmost unsuccessfully to stop the Telegraph Bill of that year, *Dickinson* 1593-1596.

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2. *Schemes and Estimates for an improved and extended System:*

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Document handed in showing the plant working and ready for the metallic circuit which will be completed in London by the end of the year, *Forbes* 4277–4281. 4288. 4322–4326——Probability that many of the complaints against the National Company have been due to the disturbance arising from the change of systems,

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*Forbes* 4280——Expected completion of the new metallic circuit for London by the end of 1895, *ib.* 4421–4425.

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*London and Globe Telephone Company.* Information in detail as to the system of working of the London and Globe Telephone Company; reference to the groups of exchanges which it proposed to institute, *Thompson* 3314–3331. 3343–3363. 3376–3389. 3393–3396.

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*Manchester* (*Mutual Telephone Company*). Reference to the practice in Manchester in regard to the laying down of wires, *Sir R. Hunter* 391–393 —— Evidence respecting the capital and working of the Mutual Telephone Company in Manchester in 1890; the complaints of the National subscribers led largely to the establishment of the Mutual, *Webber* 3548–3557. 3563–3570.

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Document handed in containing an agreement between the Mutual Telephone Company and the Electric and General Investment Company, which ultimately came into possession of the New Telephone Company; by this agreement the New Company were

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*Marlborough, Duke of* (*the late*). Letters from the late Duke of Marlborough to the "Times," dated respectively 20th August 1892 and 6th September 1892, upon the steps taken by the New Telephone Company and other companies for the development of the telephone in London and throughout the country, *App.* 308, 309.

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*Metallic Circuits.* Question considered whether a system, in order to be efficient, must have the twin-wire or the metallic circuit; belief that such wires are only suitable to long-distance telephony, *Webber* 3581. 3621-3623——Statement that the new metallic-circuit system for London, will be completed by the end of the year, *Forbes* 4421–4425.

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*Microphone.* Invention of the microphone in 1878 by Professor Hughes, this instrument used in conjunction with the telephone having converted the latter into a thoroughly practical means of transmitting speech, *Lamb* 8.

*Moncur, A. H.* (Analysis of his Evidence.)—Is a merchant and power-loom manufacturer in Dundee; is also an ex-Provost of Dundee, and holds several important positions, 2293–2295. 2324–2326.

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Reference to a paper read by witness in 1884, before the Society of Arts, in order to show the injurious effects of monopoly and to suggest how cheaply telephony could be introduced in the United Kingdom under a competitive system, *Webber* 3412-3414. 3418. 3487. 3827–3835.

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great cost of the present service; suggestion of 210 subscribers that 10*l.* would be a fair rental, 5116, 5117. 5121–5137——Statement that certain tubes laid by the Electric Lighting Company were placed without the consent of the Commissioners, 5118–5120.

*Municipal Corporations Association.* Witness (who is Deputy Town Clerk of Liverpool) represents the Municipal Corporation Association and submits in detail the views of the Association upon the telephone question, *Clare* 1145 *et seq.*

View of the Municipal Corporations Association that, as the telephonic system is now an absolute commercial necessity and a great convenience for private and domestic purposes, it is most important that inter-communication between large centres of commerce should be made as easy and cheap as possible, *Clare* 1149–1151. 1222 *et seq*; 1355–1359. 1458 *et seq.*

Conclusions of the Corporations Association that the idea of municipalising the local exchanges is impracticable and wrong in principle; undesirability of the rates being pledged for carrying on a business undertaking which must result in a loss and which is not used by the large majority of ratepayers, *Clare* 1157–1167. 1260–1299. 1304 *et seq.*; 1408 *et seq.*; 1424–1443——Inclusion in the association of practically all the corporations in England outside London, *ib.* 1163–1167.

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Witness (who is Town Clerk of Leeds) submits detailed statements and suggestions on behalf of the Municipal Corporations Association, *Harrison* 1480, 1481. 1536——General agreement of witness with the evidence given by Mr. Clare, *ib.* 1482 *et seq.*

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Enumeration of the advantages that would accrue to agriculturists by the introduction of telephones in rural districts, *Webber* 3573, 3574. 3593–3597. 3785–3791—— Details of an estimate made by witness of the cost of establishing rural telephones in the county of Suffolk; this estimate is based on the supposition that the work would be undertaken by the County Council, *ib.* 3575–3586. 3598–3600. 3632–3634. 3774–3784. 3792–3802. 3887–3889. 3937–3953.

*Russell, Sir James Alexander,* LL D. (Analysis of his Evidence.)—Has occupied the office of Lord Provost of Edinburgh, and has been a member of the Town Council for fifteen years, 892–894.

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*Russell, Sir James Alexander,* LL.D. (Analysis of his Evidence)—*continued.*

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*Scotland.* Statement as to the great increase in trunk wire charges in Scotland which will result from the agreement between the Post Office and the National Telephone Company; table handed in showing the charges of the company for 2,330 inter-town rates, *Provand* 2428–2435.

Details showing the short time occupied in placing subscribers in effective communication in Glasgow, Aberdeen, Edinburgh, &c.; document containing statistics hereon, handed in, *Forbes* 4345–4356. 4407.

Statement showing the increases in the number of subscribers (National Telephone Company) in the four large Scotch towns during the last five years, *App.* 319.

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*See* also *Aberdeen. Dundee. Edinburgh. Glasgow.*

*Short Distances.* Opinion that the telephone is mostly used for short distances, *Provand* 2448–2455.

*Single-wire System.* Experience at Dundee as to the defects of the single-wire system, *Sir J. Leng* 1127–1131——Inefficiency of the single-wire system, *Preece* 2558–2561. 2610–2613——Admission that the complaints respecting the single-wire system are well founded, *Forbes* 4276. 4288.

Statement showing for several foreign countries the extent to which the single-wire system is in operation, *App.* 296–299.

*Sinking Fund.* Statement that in all the systems described by witness allowance has been made for a sinking fund in anticipation of the expiration of all licences in the year 1911, *Webber* 3899-3911.

*Spare Wire (Metropolis).* Statement as regards the mileage of spare wire at 31st December 1894, the mileage erected during the year, and the mileage thrown spare by ceased subscribers or removals during the year, *App.* 329.

*State Purchase and Control:*

Grounds for the opinion that the whole telephonic system must be considered as a national undertaking, and should be taken over by the Government, *Clare* 1151-1157. 1233-1235. 1429–1431. 1464, 1465——Anticipation that if the Government take over the whole system a considerable reduction in the charges might be made by working at something like cost-price, and that developments would take place, in the interests of the public, that might not pay at once, *ib.* 1152, 1153.

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Paper handed in by Mr. Preece showing for several foreign countries whether the telephones are in the hands of the State, *App.* 296-299.

*See* also *Competition.* *Local or Municipal Authorities.* *Post Office.*

*Stockholm.* Comparison of the charges in Stockholm with those of the National Telephone Company, showing that the latter are more than treble the former, *Lamb* 193–195. 200–204. 352–358. 367, 368——Result of inquiries in regard to the much smaller charges that prevail in continental cities, notably Stockholm, *Chisholm* 462, 463. 565–575——Description of the extent and working of the three telephone companies in Stockholm, *Colquhoun* 777–788. 816-821.

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*Streets.* Objection to private companies having authority over the streets, *Bisset* 1036, 1037——Necessity of an Act of Parliament empowering corporations to break up the streets for the purpose of pulling down underground telephone wires; practical agreement of all the corporations to withhold their consent to the exercise of way-leave powers under the Act of 1892; *Clare* 1172–1179. 1300-1303. 1348–1352. 1401, *et seq.*

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*Subscribers and Terms of Subscription.* Opinion that the difficulties arisingf rom the increase in the number of subscribers to any telephone exchange have been exaggerated, *Webber* 3474. 3619, 3620 —Contention that it is unnecessary for any lists of subscribers to be kept at public call offices, *ib.* 3756–3768.

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*Sweden.* Particulars respecting the number of subscribers, and the area covered by the telephone, in Christiana, *Lamb* 204-208. 210–213——Increased rates to be charged in Sweden, *ib.* 5168, 5169. 5172. 5226.

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Return containing information respecting the telephone service, the system in operation, terms of subscription and number of subscribers, trunk-wire charges, &c., *App.* 298, 299.

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*Switchboards.* Detailed information in regard to switchboards; advantages of the multiple switch, which gives an operator command over 10,000 subscribers, *Preece* 2562-2570——Description of an automatic switchboard; belief that it is adapted to small exchanges only, *ib.* 2738, 2739.

*Switzerland.* Very extensive use of the telephone in Switzerland, *Forbes* 4265——Increase to be made in the terms of subscription by large users of the telephone in Switzerland, *Lamb* 5169-5172.

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## T.

*Telegraphs (Postal Revenue):*

Detailed statement to the effect that the revenue of the telephone companies from 1886 to 1891 showed an increase of 204,000*l.*, whilst the net telegraph revenue presented a corresponding diminution, *Lamb* 65–68. 74–82. 120–122——Examination as to the causes of the diminished telegraph revenue; belief that it is largely due to the telephones, and is also affected by the increase in the pay of the telegraphists, *ib.* 69. 115–117. 123-129. 131. 144–159. 361.

Grounds for the opinion that an increase in the number of telephone subscribers (as at Glasgow) would not affect the revenue of the Post Office from the post offices and telegraphs, *Chisholm* 593-603——View of witness that telephones do not affect the telegraphic revenue, *Colquhoun* 809, 810.

Examination as to the effect of the telephones on the telegraph revenue; probability that the royalties are not sufficiently heavy, *Sir J. Russell* 941–951——Evidence to the effect that at Liverpool the telephone is doing a great deal of the work that would otherwise have been done by the telegraph, the telegraph business between Liverpool and Manchester having been practically ousted by the telephone, *Clare* 1231, 1232——No doubt that part of the net loss of 240,000*l.* a year incurred by the Post Office in the telegraph business is due to the competition of the telephones; contention, however that part of the loss is also due to press messages being carried at a lesser rate than other telegrams, *ib.* 1306 *et seq*; 1430, 1431.

Probability that increased telephonic service in London will prove detrimental to telegraphic communication, *Dickinson* 1720-1725——Discussion as to the effect of an increased telephone service on the revenue, *Preece* 3036–3041. 3152, 3153.

Document referred to (handed in) illustrating the effect of the telephone service on that of the telegraph in various European cities, *Forbes* 4370–4376. 4408——Probability that on the completion of the trunk system the telephone will seriously affect the telegraph revenue, *ib.* 4956-4961——Probability also that the purchase of telephones by the Post Office and the institution of a cheaper service would entail a loss on both the telephone and telegraph revenues, *ib.* 5099–5103.

Report read from the Postmaster of Liverpool showing how the extended telephone facilities have arrested the normal development of the local telegraphs; report handed in, together with a statement from Norway of a similar nature, *Lamb* 5182-5189. 5265-5267——Discussion as to whether a larger development of the telephone would not assist the telegraph service; opinion that the telephone generally results in becoming a competitor, *ib.* 5242–5253.

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*Terminal Charges.* Objections to the clause of the Post Office agreement which deals with terminal charges, *Dickinson* 1602-1606. 1629-1633. 1653-1662. 1739-1749——Grounds

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Grounds for believing that terminal charges would render the system of municipal exchanges difficult and should therefore be abolished, *Provand* 2507-2523. 2531–2543. 2546–2553.

*Thompson, Professor Silvanus P., D.Sc., F.R.S.* (Analysis of his Evidence.)—Has been a member of the Institute of Electrical Engineers for fifteen years; has acted as adviser on telephonic matters to different companies, and confirms the evidence given by Mr. Crompton, 3270 *et seq.*

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*Trunk Wires:*

Details respecting the negotiations entered into between the companies and the Post Office in regard to the construction of trunk wires, *Lamb* 32–37 —— Explanation of the policy decided upon by the late Government as set forth in a Treasury Minute of May 1892; one of the features was the acquisition of the trunk wires by the Post Office, *ib.* 85–89. 168–174. 364–366.

Reference to the Telegraph Act of 1892, authorising the raising of a certain sum to defray the expenses of the acquisition of the trunk wires from the companies, *Lamb* 88. 90–94 —— Statement that an agreement was made with the "New" and the "National" Companies in August 1892; detailed explanation of the heads of this arrangement, *ib.* 89. 101–103. 198, 199. 309–313. 345–348. 350, 351.

Description of the trunk wires, showing the places connected by them; chart of the backbone system handed in, *Lamb* 94–100. 130 —— Belief that the taking over by the State of the trunk wires is a step towards acquiring the telephone generally, *ib.* 103. 219 —— Discussion as to whether the policy of the Government in acquiring the trunk wires has not resulted in a decided benefit to the companies at the cost of the public, *ib.* 214–234.

Doubt as to any public benefit arising from the Government taking over the trunk-wire system only, unless the number of trunk lines be increased, *Clare* 1153-1155 —— Dissent from certain evidence as to the comparatively minor importance of the extra-mural telephony, the wires within the local exchange area being of even more importance than the trunk wires, *Harrison* 1527–1530.

Evidence purporting to show that the double trunk wires which are to be provided by the Post Office will be useless unless the exchanges are also fitted with double wires; testimony of Mr. Wallace, a director of the New Telephone Company, on this subject, *Provand* 2504, 2505.

Detailed discription of the backbone system of trunk wires: opinion that it will be very perfect owing to the heavy copper with which the lines are constructed, and will be enormously used, *Preece* 2614-2629 —— Further information respecting the Post Office trunk wires in course of construction; so far they have cost 374,000*l.*, *ib.* 2949–2962 —— Belief that when the trunk system is established the calls from one town to another will exceed the calls within towns, *ib.* 3098–3102. 3154-3162.

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*Underground Wires.* Comparison of the cost of underground and overhead work; explanation that paper insulation has so reduced the price of underground work as to make it virtually as cheap as overhead, *Preece* 2595–2603 —Estimate of 55*l.* per subscriber as the cost of an underground system in London, *Preece* 2715, 2716 ——Difficulties experienced in London in regard to both underground and overhead wires, *ib.* 2729–2734. 2736, 2737.

*Undue Preference.* Advisability of provisions to prevent the telephone company unfairly favouring one exchange area at the expense of others and of giving undue preference as between one subscriber and another, *Clare* 1180–1187.

*Uniformity of System.* Desirability of having standard regulations which should be applicable to all towns, *Carbutt* 1800–1804 ; *Flood-Page* 1930–1933.

*United States.* Examination as to the growth of telephone business in the United States ; reference to three visits made by witness in 1877, 1884, and 1893, showing that in ten years the total mileage of wire has increased by 462,000 miles, *Preece* 2630–2634 ——Evidence showing the daily calls per circuit in cities of the United States and in Berlin, Paris, London, &c., *ib.* 2682——Explanation of the substitution in America of an electric lamp in place of visual signal of call, *ib.* 2739–2745. 2796.

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*United Telephone Company.* Particulars as to the licenses granted by the Post Office to the United Telephone Company under the Telegraph Act of 1869; *Lamb* 13–19. 21–24——Statement that the United Company allowed subsidiary companies the use of its patent apparatus in parts of the country, other than London, provided licenses were obtained from the Post Office, *ib.* 19. 25–30. 40, 41.

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*Waldie, James Paterson.* (Analysis of his Evidence.)—Is a coal merchant in Edinburgh ; appears at the request of the telephone company, 2223–2227. 2240–2243.

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*Ward, The Hon. J. G., M.H.R.* (Analysis of his Evidence.)—Is Postmaster General and Treasurer of the Government of New Zealand ; has held the former position for five years, 3995–4000.

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*Way-leaves.* Detailed explanation of the powers of the Postmaster General and his licenses in respect of way-leaves, *Lamb* 294–303; *Colquhoun* 734–753. 845, 846. 856–863——Resolution of the Municipal Corporations Association, that the corporations of England should, as a body, oppose the exercise of the rights to be conferred on the National Telephone Company by the Postmaster General with regard to underground way-leaves, *Harrison* 1499 *et seq.*; 1581–1591——Opinion that something on the basis of the agreement made some time ago by the Leeds Corporation with the telephone company would be reasonable solution of the underground way-leave difficulty, *ib.* 1499 *et seq.*

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*See* also *Streets.*

*Webber, Major General, C. E., C.B., R.E.* (Analysis of his Evidence.)—Was for nine years divisional engineer of the Postal Telegraphs and had charge of the telegraph service in the Egyptain War; was also managing director of the Bell and Edison United Telephone Company, 3402–3411.

Reference to a paper read by witness in 1884 before the Society of Arts in order to show the injurious effects of monopoly and to suggest how cheaply telephony could be introduced in the United Kingdom, 3412–3414. 3418. 3487. 3827–3835——Opinion that the Post Office are right in acquiring the arteries of the telephone system, viz., the trunk-wires, but that the capillaries should be left to private enterprise, 3415, 3416. 3868–3870. 3912——Belief that a system of royalties would prevent loss to the telegraph revenue, 3417. 3798–3801.

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Question considered whether a system in order to be efficient must have the twin wire or the metallic circuit; belief that such wires are only suitable to long distance telephony, 3581. 3621–3623——Opinion that both town and county councils are perfectly competent to undertake the telephone service, but that competition in any form is necessary in default of purchase by the State, 3584–3592. 3618. 3824. 3868–3873. 3957-3973.

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# REPORT

FROM THE

# SELECT COMMITTEE

ON

# TRUSTS ADMINISTRATION;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

MINUTES OF EVIDENCE,

AND APPENDIX.

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*Ordered, by* The House of Commons, *to be Printed,*
6 *May* 1895.

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248.

## Trusts Administration.

*Ordered,*—[*Monday, 18th February* 1895]:—That the Select Committee be re-appointed to inquire into the Liabilities to which persons are exposed under the present Law as to the Administration of Trusts, and whether any further legislative provision might be made for securing adequate Administration of Trusts without the necessity of subjecting private trustees and executors to the risks which they now run.

Committee nominated of—

| | |
|---|---|
| Mr. Butcher. | Sir Charles Pearson. |
| Dr. Farquharson. | Sir Henry Roscoe. |
| Mr. Heneage. | Mr. Attorney General. |
| Mr. Kimber. | Colonel Howard Vincent. |
| Sir George Osborne Morgan. | Mr. Warmington. |
| Mr. Arthur O'Connor. | |

That the Committee have power to send for Persons, Papers, and Records.

That Five be the Quorum of the Committee.

*Ordered,*—[*Tuesday, 19th March* 1895]:—That Mr. Heneage be discharged from the Select Committee on Trusts Administration, and Mr. Greene be added to the Committee.

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# REPORT.

THE SELECT COMMITTEE appointed to inquire into the Liabilities to which persons are exposed under the present Law as to the ADMINISTRATION OF TRUSTS, and whether any further legislative provision might be made for securing adequate Administration of Trusts without the necessity of subjecting private trustees and executors to the risks which they now run;——HAVE agreed to the following REPORT:—

YOUR Committee were appointed on the 18th February, on the motion of Colonel Howard Vincent, to inquire into the liabilities to which persons are exposed under the present Law as to the Administration of Trusts, and whether any further legislative provision might be made for securing adequate administration of trusts without the necessity of subjecting private trustees and executors to the risks which they now run. Conformably with this Order, Your Committee sat on 11 days, and examined 18 witnesses, including the Lord Chancellor, Lord Halsbury, Lord Watson, Lord Justice Lindley, Lord McLaren, two County Court Judges, and Members of the Bar, and Solicitors of the greatest distinction. After hearing this evidence, it was the opinion of the Committee that sufficient materials had been obtained to enable them to report their conclusions to the House.

The terms of the Reference were wide enough to include the whole of the United Kingdom, and some evidence was given both as to Scotland and Ireland.

In Ireland there does not seem to be any widespread desire for change, or complaint of the existing law. Scarcely any communication on this subject reached Your Committee from Ireland or from Irish representatives, and accordingly it was not thought necessary to pursue the inquiry in regard to that country.

More evidence was taken in regard to Scotland, where, as appears in this Report, a special practice, the creation of statute, has been in force for some time. The existing law works well, and no desire was expressed for change except on two points. Lord Watson recommended that trustees in Scotland should be enabled to obtain the direction of a judge in chambers, as can now be done in England under an originating summons. He also recommended that any testator in Scotland should be at liberty to nominate a judicial factor in his will, who, upon confirmation by the Court, should become an officer of the Court. These would be desirable alterations, though subsidiary in comparison with other matters embraced in the Order of Reference.

In England it is undoubted that serious grounds of complaint exist. An enormous amount of personal property, as well as a great deal of land, is held upon trusts, some of which last for a considerable number of years. All these trusts are administered by private persons, often members of the family, who receive no remuneration, and are not allowed to make any profit, while the law imposes upon them a very serious responsibility. There is a statutory right in trustees to protect themselves by taking the directions of a Chancery Judge in regard to the exercise of their duties, but the fear of expense is apt to deter conscientious trustees from taking this course in a small estate. In return for the protection thus offered, the Courts of Chancery apply a more rigorous standard to the conduct of trustees than to the case of other bailees.

They are not allowed to delegate their duties, unless authorised to do so by the terms of their appointment, and will be held personally responsible for any misapplication of the funds by a stockbroker or solicitor, or even a co-trustee, which has been made possible by their parting with those funds, unless in strict compliance with the ordinary course of business. They are also personally responsible if they depart from the directions of the instrument appointing them, even if that departure be due to a perfectly honest misunderstanding of their duties.

In a recent decision in the House of Lords, Spaight *v.* Gaunt, a step was taken in the direction of alleviating the position of a trustee, and the overwhelming weight of opinion among the witnesses who gave evidence before your Committee was in favour of a still further alleviation. Your Committee recommend that the Court be empowered to relieve any trustee from personal responsibility when satisfied that he has acted honestly, reasonably, with the intention of carrying out the terms of the trust, and ought fairly to be excused for having acted without the directions of the Court. They also recommend that the Court be empowered to give sanction beforehand to such departures from the terms of any trust as have become expedient owing to altered circumstances, and are for the advantage of those beneficially interested. They also consider that the practice in obtaining the direction of a Judge, which has been described as a litigation in miniature, ought to be cheapened and simplified.

Under present circumstances it is not surprising to learn that much difficulty is found in inducing competent persons to undertake the office of trustee. The gentlemen representing the Incorporated Law Society expressed the opinion that this had been exaggerated. There may have been exaggeration in some quarters, but there can be little doubt that the difficulty is very real and increasing, especially with poor people, whose circle of relatives does not contain many persons of education.

Apart from the difficulty of finding competent persons to act as trustees, the frequency of instances in which beneficiaries suffer loss from the defalcations of dishonest trustees, or the negligence of careless and incompetent trustees, is a very serious matter.

Probably few trustees contemplate dishonesty when they first enter upon their duties, or have the opportunity of being dishonest while they are associated with others in the trust. It is when all the trustees except one have died or retired, and no fresh appointments have been made, that the temptation and opportunity arise. And the cases in which the temptation prevails are often those in which the trust has continued for a considerable number of years, and the circumstances or position of the trustee have been altered.

However this may be, the evidence puts it beyond question, that large sums of money are annually misappropriated by private trustees. No doubt the money so stolen bears but a small proportion to the vast sums in trust in this country ; but though accurate statistics upon such a subject are not available, the highest authorities confirm the prevalent opinion of the public, that much loss and consequent suffering is caused by this kind of malversation ; and those who suffer are chiefly the poorer and more helpless. In great estates, where the best legal advice and supervision are attainable, and persons of responsible position can be obtained as trustees, the risk is much less than with small properties. A great deal of troublesome and gratuitous work is undoubtedly done by trustees in all classes of life, and, in the great majority of cases, with entire honesty ; but if trustees are disposed to be dishonest, they have much greater difficulty in compassing their ends where the beneficiaries are educated people, with access to legal advisers of good position, than where the beneficiaries are themselves uneducated or too poor to obtain efficient assistance.

A suggestion was made in the course of our inquiry which, if practicable, would certainly be of considerable value. Most of the cases in which trust monies are stolen appear, as already stated, to be those in which either under the terms of the original appointment or by the death of a co-trustee the property is vested in a single person. Obviously, it is more difficult for a man to commit a dishonesty where the concurrence of another is needed. Accordingly, it was suggested that, at all events where trust monies standing in the name of two or more trustees pass by survivorship to the sole control of one person, the law ought to forbid any alienation of the fund by the surviving trustee without preliminary notice to the *cestui que* trust.

There might be difficulties in carrying out these suggestions which it would be inappropriate here to consider. There would still remain the cases in which the trust funds consist of cash, negotiable securities, book debts, merchandise, personal chattels, and other property not standing in any names. There would also remain the cases of misappropriation by the combined dishonesty of two or more trustees, which, though of less frequent occurrence, do nevertheless occur, as well as those in which one dishonest trustee procures from innocent but inattentive colleagues the signatures necessary to enable him to perpetrate a fraud.

In some degree greater strictness in the Criminal Law might tend to diminish misappropriation of trust funds. Under the present law a simple trustee who misappropriates

propriates property to his own use is not liable to criminal proceedings unless the trust is constituted by some instrument in writing; whereas a person intrusted with property for safe custody in his capacity of banker, merchant, broker, solicitor, or other agent of a like character, who misappropriates it, is liable to criminal proceedings. No doubt the excuse for this distinction is that in the latter instance the character of the occupation sufficiently denotes the nature of the duty, while in case of ordinary persons holding property with no written instrument describing the nature of their duty, they might be placed in unfair peril if it were possible upon merely oral evidence of the nature of the trust to convict them criminally of having violated it. But, although this consideration points to the necessity of caution in altering the law, it does not justify the continuance of a law which enables many persons guilty of stealing money indisputably held upon parol trusts to escape the punishment which they deserve. Your Committee recommend such an alteration of the law as shall end this anomaly.

It appears, however, to Your Committee that no extension of the criminal law will be sufficient to provide a remedy for existing evils. The criminal law already punishes those who misappropriate property which they hold as trustees under a written instrument, but such misappropriation is still too common. Some further remedy is required. It would be an immense benefit if those who desire to place their money in trust for others, or to have their money distributed at their death, or who are the beneficiaries under trusts, could know that there was within their reach a cheap method by which they could secure just administration of the trust funds with an absolute assurance of security. It would also be a benefit to trustees, who from unforeseen difficulty or from altered circumstances, might desire to be relieved of their burden, that they should be able without expense to transfer to competent and responsible hands those duties which they can no longer satisfactorily or conveniently discharge. Unquestionably, there exists a widespread desire for some such facilities; and numerous witnesses of the very highest authority expressed decided opinions in favour of enabling those who desired it to place trust funds under the control and management of some public authority, subject always to the right of that public authority to decline any trusts which it might appear undesirable to undertake.

A Bill for the establishment of a Public Trustee was introduced by the late Government in 1890, and passed through the House of Lords, after being carefully considered. It was approved by all the Law Lords, and met with the general assent of that House. It was afterwards introduced by Mr. Goschen, then Chancellor of the Exchequer, into the House of Commons, though it did not reach a second reading. Similar Bills have been previously introduced in the House of Commons by Colonel Howard Vincent and Mr. Warmington.

The Incorporated Law Society deputed two gentlemen, the Incorporated Law Society of Dublin deputed one, and the Associated Provincial Law Societies also deputed one to represent their views. The ground taken in their evidence by all those gentlemen was substantially the same; they did not consider that beneficiaries do in fact sustain such losses from dishonest trustees as would justify the introduction of the proposed change. They considered that any such project would involve additional expense in the administration of trusts; that an official trustee could not exercise the discretion required in such matters, for example, as making payments for the maintenance or advancement of children or the approval of marriages, the granting of leases, the management of mines, or the carrying on of businesses, and that upon each step he would have to be satisfied by legal evidence at considerable expense of every fact relating to the family history or requirements which would be known without inquiry to a private trustee. Speaking generally, their criticisms were directed rather against the administration than against the custody by a public official of trust monies.

A further ground of objection was, that though it was proposed to make the employment of a public trustee purely voluntary, yet hereafter, when the expense of establishing that functionary and his office had been incurred, and there was found to be no business, or not sufficient to defray the expenses of the establishment, Parliament would proceed to make the employment of the public trustee compulsory. In this apprehension Your Committee are unable to concur, though they agree that any Act for the establishment of a public trustee should be entirely optional, except in so far as Courts of Justice in particular instances think fit to appoint a public trustee.

In regard to the other objections, Your Committee, while not questioning the good faith with which they were presented, cannot accept them as valid. No

one can doubt that the best method of administering trusts is by private trustees, if men can be found competent, honest, and willing. The difficulty arises where competent persons cannot be found, or where persons, believed to be honest, show themselves dishonest. The extent to which defalcations occur has been already dealt with. Experience in Scotland and in New Zealand, to which reference is made later, has not shown that complaint arises on the score of expense, and if proper rules are made there need not be any complaint on that score in England. In the great bulk of trusts no delicate discretion has to be exercised, nor is it obvious why a judicious public trustee should not exercise a wise discretion in such matters, as is constantly done by judges in the case of wards of Court. As regards the alleged necessity of a public trustee satisfying himself by legal and costly evidence of family facts or family requirements, that also has not been found an obstacle either in Scotland or New Zealand. Provisions exist under the Judicature Act, 1894, by which rules of Court can be made dispensing with this technical necessity in the distribution of property, and it appears to Your Committee that it would be easy to adapt that machinery to the case of a public trustee and avoid the evil which is apprehended.

It appears to Your Committee that a case has been made out in favour of the establishment of a system under which private trusts can be administered, if so desired, by or under the control of some official or judicial authority, which should also have the custody of the funds.

The next point for consideration is, in what manner, or by what machinery, such a system can best be worked. Upon this point various suggestions were advanced.

Several witnesses advised the establishment of a department, at the head of which should be a public trustee in London, with branches throughout the country. Any person to be at liberty to appoint the public trustee to administer any kind of trust, testamentary or other, and any existing trustee to be at liberty to apply that the public trustee should take over his functions. On the other hand, the public trustee was to be free to decline any trust if he considers it inadvisable or inconvenient to accept it, and to be able, where he thought it necessary, to employ solicitors or other persons familiar with any particular matter which he might undertake, and also, to apply, without formality or expense, for directions to a judge in chambers. It was also urged that the public trustee should be able to act in conjunction with a private trustee, the trust property to be vested in the former. The charge for this service to be a commission, regulated by a scale settled by the Lord Chancellor and the Treasury. No immediate appointment of any large number of officials was contemplated, but rather a commencement upon tentative lines with a view to extension as circumstances should require. This was in substance the proposal made in the Government Bill of 1890.

A system of this character already exists in New Zealand. It was established in 1872, and found great favour. Some causes of complaint arose, not apparently of a very serious character. In 1891 a Royal Commission was appointed in the Colony to inquire into these complaints, and in 1894 a Consolidating Act was passed embodying all previous legislation, and including some changes recommended by the Royal Commission. The main features of the Public Trust Office in New Zealand, so far as they relate to private trusts, are as follows: There is a public trustee who has an advisory Board constituted of three members of the Ministry and four other officials. He cannot be compelled to accept any except a limited class of trusts, but he may accept any private trust. He does not, as a rule, accept trusts which involve a good deal of discretionary work, and declines any trust unless the provision of the deed, will, or instrument allow of an investment of the capital fund in first mortgages of the colony, or in the stocks, funds, debentures, or securities of any British colony, or according to the Public Trust Office Acts. Hitherto larger estates have not found their way, as a rule, into the hands of the public trustee, though the tendency is more in that direction than it was. Only a very small percentage of trust funds are at present in his control. It is in small estates, and especially small intestate estates, that the public trustee has done his most useful work, and we were informed that this institution is much esteemed in New Zealand. At the end of 1893 there were estates in the Public Trust Office amounting in capital value to 1,450,917*l.*, of which nearly one-half were strictly private estates. The population of New Zealand is about 700,000, scattered over a large area, and this, of course, makes the conditions somewhat different from those in England.

A second proposal was made, also, in favour of the appointment of some public official to hold trust property, and administer private trusts, with the option of declining such as he thought fit, but differing in one point of considerable importance. According to

to this project, the persons to administer private trusts were not to be officials of any department, but were to be officers of the Courts of Justice, under the immediate supervision and control of a judge. Under the existing law in England, the Chancery Division of the High Court is able, when it thinks fit, to assume and carry out the general administration of any trust estate. Orders for general administration, however, are not readily granted if opposed, the matter resting now in the discretion of the judge in the circumstances of a particular case. Although the cost of such proceedings is less than in former times, it still is sufficiently heavy to be prohibitive in the case of small estates, and probably for the same reason this method is rarely adopted, even in larger estates, unless contentious questions arise which require litigation. One feature of the present system seems to be that any party disposed to be troublesome can inflame the expense of administration. Parties of this disposition abound in Courts of Law.

In the course of inquiry a third method was suggested, or rather suggested itself, after the evidence of Lord MacLaren, one of the Lords of Session in Scotland. Your Committee learned that there is already in existence in Scotland a system of administering private trusts, under judicial supervision, which appears to have worked admirably. The system has grown gradually, and has been extended, so that now what is called a judicial factor can be appointed by the Court, practically, in every private trust, whether upon the death, resignation, or declination of trustees, as well as in cases of lunacy or intestacy. And, if upon the creation of a trust, whether by settlement or will or otherwise, or whether of long or short duration, the truster desired that his intention should be carried out by a judicial factor, the Court is able to make the appointment. The sheriff courts have a limited jurisdiction in certain matters. The practice is as follows: Upon the application of those beneficially interested in the trust property, or of some only among them, if the Court thinks it expedient, a person usually agreed upon, but sometimes selected by the Court, is appointed judicial factor. He is not an official, but a private individual—generally an accountant. All the trust property vests in him, and he is thenceforth accountable for its investment and administration. He gives security for the due discharge of his duties and receives such commission, varying from 1 to 3 per cent. per annum upon the income of the trust estate, as is fixed by the judge or the accountant of court, and he may employ solicitors or other professional men only where it is necessary. He has to keep regular accounts, which are sent once a year to the office of the accountant of court, and audited. He has to keep a separate bank account for the trust money, and is liable to a penalty and deprivation of office if he keeps more than 50*l.* for more than 10 days in his own private account. He cannot exercise any discretionary power without first making a report to the accountant of court, and if there is any difficulty it is brought under the notice of the judge. If, upon the annual account being submitted, the accountant of court sees any doubtful or unauthorised security, he makes an order for reinvestment. Whenever the accountant of court has reason to suspect anything wrong he can call for vouchers of all the investments, and if not obeyed at once he can call upon the judicial factor to consign the amount in the bank. The judicial factor can prove a will, and if authorised by the Court, as he sometimes is, can carry on a business.

The capital value of the property at present administered under the system in Scotland is about eight millions sterling, which, supposing that the wealth of England were taken as ten times that of Scotland, would correspond to a sum of 80 millions in the larger country. During nearly half a century since this system came into operation no single trust estate has lost anything by the defalcation of a judicial factor. In the few instances of dishonesty which have occurred the loss has been made good by the sureties.

It appears that there is very little difference between the expense of a judicial factory and a private trust. The commission covers a good deal of work, some of it being work which if there were a private trustee would be done by a solicitor and charged for by fees.

Judicial factors are very often appointed in quite small estates of a few hundred pounds, such as may have been accumulated by a successful working man, and the system is largely taken advantage of and gives great satisfaction in Scotland.

In considering what methods would be most suitable for England, the primary conditions of success must be borne in mind. It is indispensable to the success of any system that it should be inexpensive; that those who administer it should be easily and

promptly accessible, and personally ready to take the same steps as a sensible private trustee now takes to acquaint himself with all that belongs to the trusts committed to him. Whether the system is to be worked by an official department, or by a Court of Justice, or by co-operation between the two, the individual who on any particular occasion manages the trust must not be separated either by official red-tape or by judicial etiquette from those with whose interests he has to deal. It must be made clear that he is not a person to be approached by formal proceedings, either of an official or of a legal character, requiring to be satisfied of the most trifling fact by prolix and expensive proof, but a man empowered and required to use his own judgment, to make any necessary inquiries for himself, and to take the initiative in the interest of the trust either of his own motion or at the request, however informal, of anyone concerned. If such administrators be made available to any who desire their services, the system would be of the highest utility. But if all that can be offered to the public is an elaborate hierarchy of hardly accessible officials, or a reproduction of the tedious and costly methods of the past, it would be as well to leave things as they are.

Your Committee have arrived at the conclusion that the desired result might be attained by the employment of suitable persons in each district, who should be subject to judicial control. The trust funds should be deposited either in Court or with the Paymaster General, no securities being at any time allowed to stand in his name, the holding of which involve a liability; with this reservation any investments authorised by the terms of the trust instrument or by the law and practice of the Court might be permitted. It might be advisable to enable the Court in special cases to allow the trust funds to stand in the name of the person appointed to administer the trust, as is always done in Scotland, but then he ought to find security.

It does not appear desirable that the persons appointed to administer trusts under judicial control should of necessity be officials. There ought, indeed, to be in every district an official whose duty it should be to undertake that function when required to do so. Such officials might be from time to time selected by the Lord Chancellor for this purpose from the District Registrars and County Court Registrars in the country, or from the wider range of Court officials in London. Or an even larger field of choice might be left to the Lord Chancellor.

But it ought to be also possible to appoint a professional or other suitable person, such as a solicitor or accountant, preferably on the recommendation of those interested, of whose probity and capacity the Court is satisfied. Such a trustee would frequently know the requirements and affairs of the beneficiaries, and for the sake of his own credit, as well as with a view to further employment of a like kind, would be under an inducement to discharge his duty efficiently.

A commission should be charged for these services, upon a scale to be fixed by the Lord Chancellor and the Treasury, such as will cover the remuneration of any non-official who might be appointed, and ensure that the scheme shall be self-supporting.

Whosoever is appointed to administer a trust, whether an official or a non-official person, ought to be required to act precisely as private trustees now act, using his own discretion, and proceeding not as a judge, but as a man of business. But in all respects he should be in the situation of an officer of the Court, able to ask for directions, and bound to obey them, whether asked for or not. In any case of difficulty he should be at liberty, without either formality or expense, to consult the judge, who might, if he thought it necessary, give other parties an opportunity of presenting their views, or informing his mind before giving his directions. Like facilities should be given for hearing any complaint or representation by persons interested in the trust. In short, if these matters are to be under the control of a judge, it is essential that he should on occasion supervise administration without formality. If such supervision is available, it will command the complete confidence of the public, and will secure efficiency. All judges of the High Court, and such judges of County Courts as the Lord Chancellor may from time to time authorise, should be empowered to exercise these powers.

Accounts should be rendered at fixed periods by all persons so appointed to administer trusts, and audited officially. Your Committee were much impressed with the advantages of the system of annual audit by the accountant of court in Scotland. They recommend that a similar provision be made in regard to England, and that an official auditor be enabled to make representation to the Court as to any trust being administered under the control of the Court at any time, and may also at any time be required

required by the Court to investigate and report upon the management of any such trust.

It would be not only unnecessary but mischievous to make any such system as is here proposed compulsory. Either those who create trusts, or trustees themselves, should be empowered to apply for administration under the control of the Court, and the Court should be at liberty to decline such administration. Beneficiaries should be enabled to make a like application, but in every case the discretion of the Court should be unfettered. Any appointment should be revocable at discretion.

It would be necessary to provide rules for regulating the procedure of the Courts in regard to the administrative as well as the financial side of the proposed scheme. Your Committee consider that much will depend upon the scope and thoroughness of these rules. In particular, they ought to prevent the possibility of litigation at the expense of the trust fund except where absolutely indispensable, and to ensure the disallowance of any expense or outlay by the appointed trustee except where from the nature of the payment or of the work done it was practically impossible for him to avoid it. In view of the fact that both administration and finance will be involved in these rules, your Committee recommend that the rule-making authority should be the Lord Chancellor with the concurrence of the Treasury.

Your Committee recommend legislation for England and Wales upon the lines above indicated.

6 *May* 1895.

# PROCEEDINGS OF THE COMMITTEE.

## *Friday*, 22*nd February* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Mr. Warmington. | Sir Charles Pearson. |
| Colonel Howard Vincent. | Sir George Osborne Morgan. |
| Mr. Attorney General. | Mr. Kimber. |
| Mr. Arthur O'Connor. | |

Mr. ATTORNEY GENERAL was called to the Chair.

The Committee deliberated.

[Adjourned until Monday, 4th March, at Twelve o'clock.

## *Monday*, 4*th March* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Sir George Osborne Morgan. | Mr. Kimber. |
| Mr. Warmington. | Dr. Farquharson. |
| Mr. Arthur O'Connor. | Sir Henry Roscoe. |
| Colonel Howard Vincent. | |

The *Lord Chancellor*, attending by permission of the House of Lords, was examined.

[Adjourned until Friday next, at Eleven o'clock.

## *Friday*, 8*th March* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Mr. Kimber. | Sir Henry Roscoe. |
| Sir George Osborne Morgan. | Mr. Arthur O'Connor. |
| Mr. Warmington. | Colonel Howard Vincent. |
| Dr. Farquharson. | Mr. Butcher. |

Lord *Halsbury*, attending by permission of the House of Lords, and Lord Justice *Lindley* were examined.

[Adjourned until Monday next, at Twelve o'clock.

## *Monday*, 11*th March* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Mr. Warmington. | Mr. Arthur O'Connor. |
| Dr. Farquharson. | Colonel Howard Vincent |
| Mr. Kimber. | Mr. Butcher. |
| Mr. Heneage. | |

Mr. *William Melmoth Walters* and Mr. *John Hunter* were examined.

[Adjourned until Monday next, at Twelve o'clock.

*Monday*, 18*th March* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Colonel Howard Vincent. | Dr. Farquharson. |
| Sir Charles Pearson. | Sir George Osborne Morgan. |
| Mr. Arthur O'Connor. | Mr. Warmington. |

Sir *Julius Vogel*, K.C.M.G., Sir *Westby Perceval*, K.C.M.G., and Mr. *Charles Henry Morton* were examined.

[Adjourned until Thursday next, at Twelve o'clock.

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*Thursday*, 21*st March* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Mr. Greene. | Sir Henry Roscoe. |
| Sir George Osborne Morgan. | Mr. Arthur O'Connor. |
| Mr. Warmington. | Sir Charles Pearson. |
| Dr. Farquharson. | Colonel Howard Vincent. |

Mr. *Cozens-Hardy*, a Member of the House, and Mr. *John Robinson Adams* were examined.

[Adjourned until Monday next, at Twelve o'clock.

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*Monday*, 25*th March* 1895.

MEMBERS PRESENT:

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|---|---|
| Mr. Attorney General. | Mr. Greene. |
| Mr. Warmington. | Mr. Kimber. |
| Sir Charles Pearson. | Colonel Howard Vincent. |
| Dr. Farquharson. | |

In the absence of Mr. ATTORNEY GENERAL, Mr. WARMINGTON took the Chair.

Mr. *Trevor T. L. Overend* and Mr. *David Maxton Lewis* were examined.

[Adjourned until Thursday next, at Twelve o'clock.

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*Thursday*, 28*th March* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

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|---|---|
| Colonel Howard Vincent. | Sir Henry Roscoe. |
| Sir Charles Pearson. | Mr. Kimber. |
| Sir George Osborne Morgan. | Mr. Greene. |
| Dr. Farquharson. | |

Mr. *Herbert Ridley Boyce* and the Honourable Lord *M'Laren* were examined.

[Adjourned until Monday next, at Twelve o'clock.

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## *Monday, 1st April* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Sir George Osborne Morgan. | Colonel Howard Vincent. |
| Mr. Greene. | Sir Henry Roscoe. |

His Honour Judge *Chalmers*, Mr. *E. Lionel Clarke*, and Lord *Watson*, attending by permission of the House of Lords, were examined.

[Adjourned until Thursday next, at Twelve o'clock.

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## *Thursday, 4th April* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Sir Henry Roscoe. | Mr. Greene. |
| Dr. Farquharson. | Sir Charles Pearson. |

His Honour Judge *Lea* was examined.

[Adjourned until Monday, 6th May, at Twelve o'clock.

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## *Monday, 6th May* 1895.

MEMBERS PRESENT:

Mr. ATTORNEY GENERAL in the Chair.

| | |
|---|---|
| Dr. Farquharson. | Mr. Greene. |
| Sir Henry Roscoe. | Sir George Osborne Morgan. |
| Sir Charles Pearson. | Colonel Howard Vincent. |
| Mr. Kimber. | Mr. Butcher. |
| Mr. Warmington. | Mr. Arthur O'Connor. |

DRAFT REPORT proposed by the *Chairman* read the first time, as follows:—

"1. YOUR Committee were appointed on the 18th February to inquire into the liabilities to which persons are exposed under the present Law as to the administration of Trusts, and whether any further legislative provision might be made for securing adequate administration of trusts without the necessity of subjecting private trustees and executors to the risks which they now run. Conformably with this Order, Your Committee sat to hear evidence on 11 days, and examined 18 witnesses, including the Lord Chancellor, Lord Halsbury, Lord Watson, Lord Justice Lindley, two County Court Judges, and Members of the Bar, and Solicitors of the greatest distinction. After hearing this evidence, it was the opinion of the Committee that sufficient materials had been obtained to enable them to report their conclusions to the House.

"2. The terms of the Reference were wide enough to include the whole of the United Kingdom, and some evidence was given both as to Scotland and Ireland.

"3. In Ireland there does not seem to be any widespread desire for change, or complaint of the existing law. Scarcely any communication on this subject reached Your Committee from Ireland or from Irish representatives, and accordingly it was not thought necessary to pursue the inquiry in regard to that country.

"More evidence was taken in regard to Scotland, where, as appears in this Report, a special practice, the creation of statute, has been in force for some time. The existing law works well, and no desire was expressed for change except on two points. Lord Watson recommended that trustees in Scotland should be enabled to obtain the direction of a judge in chambers, as can now be done in England, under an originating summons. He also recommended that any testator in Scotland should be at liberty to nominate a judicial factor in his will,

will, who, upon confirmation by the Court, should become an officer of the Court. These would be desirable alterations, though subsidiary in comparison with other matters embraced in the Order of Reference.

"4. In England it is undoubted that serious grounds of complaint exist. Enormous sums of money, as well as a great deal of land, are held upon trusts, some of which last for a considerable number of years. All these trusts are administered by private persons, often members of the family, who receive no remuneration, and are not allowed to make any profit, while the law imposes upon them a very serious responsibility. There is a statutory right in trustees to protect themselves by taking the directions of a Chancery Judge in regard to the exercise of their duties, but the fear of expense is apt to deter conscientious trustees from taking this course in a small estate. In return for the protection thus offered, the Courts of Chancery apply a more rigorous standard to the conduct of trustees than to the case of other bailees.

"5. They are not allowed to delegate their duties, unless authorised to do so by the terms of their appointment, and will be held personally responsible for any misapplication of the funds by a stockbroker or solicitor, or even a co-trustee, which has been made possible by their parting with those funds, unless in strict compliance with the ordinary course of business. They are also personally responsible if they depart from the directions of the instrument appointing them, even if that departure be due to a perfectly honest misunderstanding of their duties.

"6. In a recent decision of the House of Lords a step was taken in the direction of alleviating the position of a trustee, and the overwhelming weight of opinion among the witnesses who gave evidence before your Committee was in favour of a still further alleviation. Your Committee recommend that the Court be empowered to relieve any trustee from personal responsibility when satisfied that he has acted honestly, reasonably, with the intention of carrying out the terms of the trust, and ought fairly to be excused for not having taken the directions of the Court. They also recommend that the Court be empowered to give sanction beforehand to such departures from the terms of any trust as have become expedient owing to altered circumstances, and are for the advantage of those beneficially interested. They also consider that the practice in obtaining the direction of a Judge, which has been described as a litigation in miniature, ought to be cheapened and simplified.

"7. Under present circumstances it is not surprising to learn that great difficulty is often found in inducing competent persons to undertake the office of trustee. Two gentlemen representing the Incorporated Law Society expressed the opinion that this had been exaggerated. There may have been exaggeration in some quarters, but there can be little doubt that the difficulty is very real and increasing, especially with poor people, whose circle of relatives does not contain many persons of education.

"8. Apart from the difficulty of finding competent persons to act as trustees, the frequency of instances in which beneficiaries suffer loss from the defalcations of dishonest trustees is a very serious matter.

"9. Probably few trustees contemplate dishonesty when they first enter upon their duties, or have the opportunity of being dishonest while they are associated with others in the trust. It is when a single trustee is appointed or when all the trustees except one have died, and no fresh appointments have been made, that the temptation and opportunity arise. And the cases in which the temptation prevails are often those in which the trust has continued for a considerable number of years, and the circumstances or position of the trustee have been altered.

"10. However, this may be, the evidence puts it beyond question, that large sums of money are annually misappropriated by private trustees. No doubt the money so stolen bears a small proportion to the vast sums in trust in this country; but though accurate statistics upon such a subject are not available, the highest authorities confirm the prevalent opinion of the public, that much loss and consequent suffering is caused by this kind of malversation; and those who suffer are chiefly the poorer and more helpless. In great estates, where the best legal advice and supervision are attainable, and persons of responsible position can be obtained as trustees, the risk is much less than with small properties. A great deal of troublesome and gratuitous work is undoubtedly done by trustees in all classes of life, and, in the great majority of cases, with entire honesty; but if trustees are disposed to be dishonest, they have much greater difficulty in compassing their ends where the beneficiaries are educated people, with access to legal advisers of good position, than where the beneficiaries are themselves uneducated or too poor to obtain efficient assistance.

"11. A suggestion was made in the course of our inquiry which, if practicable, would certainly be of considerable value. Most of the cases in which trust monies are stolen appear, as already stated, to be those in which either under the terms of the original appointment or by the death of a co-trustee the property is vested in a single person. Obviously, it is more difficult for a man to commit a dishonesty where the concurrence of another is needed. Accordingly, it was suggested that, at all events where trust monies standing in the name of two or more trustees pass by survivorship to the sole control of one person, the law ought to forbid any alienation of the fund by the surviving trustee without preliminary notice to the *cestui que* trust. This, however, is impracticable, as indeed was admitted by those witnesses

who most wished that, if possible, some such rule should be enacted. Vast sums of money stand in joint names in the books of banks and of railway and other companies of which a great deal is not trust money at all. Where the money is trust money it would be difficult to impose upon these banks and companies the duty of ascertaining the terms of the trust and seeing that notice had been duly given. Where the money is not trust money, as, for example, where it is partnership money standing in the name of two partners, it would not only be most onerous upon the bank or company that they should be required to satisfy themselves of the character of the fund, but also most inconvenient in a business point of view that the fund should be tied up while the necessary inquiries were in progress.

"12. It does not, therefore, appear practicable to carry these suggestions into effect, nor would such a reform, if practicable, completely deal with the mischief. There would still remain the cases in which the trust funds consist of cash, negotiable securities, book debts, merchandise, personal chattels, and other property not standing in any names. There would also remain the cases of misappropriation by the combined dishonesty of two or more trustees, which, though of less frequent occurrence, do nevertheless occur; as well as those in which one dishonest trustee procures from innocent but inattentive colleagues the signatures necessary to enable him to perpetrate a fraud.

"13. In some degree greater strictness in the Criminal Law might tend to diminish misappropriation of trust funds. Under the present law a simple trustee who misappropriates property to his own use is not liable to criminal proceedings unless the trust is constituted by some instrument in writing; whereas a person intrusted with property for safe custody in his capacity of banker, merchant, broker, solicitor, or other agent of a like character, who misappropriates it, is liable to criminal proceedings. No doubt the excuse for this distinction is that in the latter instance the character of the occupation sufficiently denotes the nature of the duty, while in case of ordinary persons holding property with no written instrument describing the nature of their duty, they might be placed in unfair peril if it were possible upon merely oral evidence of the nature of the trust to convict them criminally of having violated it. But, although this consideration points to the necessity of caution in altering the law, it does not justify the continuance of a law which enables many persons guilty of stealing money indisputably held upon parol trusts to escape the punishment which they deserve. Your Committee recommend such an alteration of the law as shall end this anomaly.

"14. It appears, however, to your Committee that no extension of the Criminal Law will be sufficient to provide a remedy for existing evils. The Criminal Law already punishes those who misappropriate property which they hold as trustees under a written instrument, but such misappropriation is still too common. Some remedy is required beyond the fear of punishment. It would be an immense benefit if those who desire to place their money in trust for others, or to have their money distributed at their death, or who are the beneficiaries under trusts, could know that there was within their reach a cheap method by which they could secure just administration of the trust funds with an absolute assurance of security. It would also be a benefit to trustees, who from unforeseen difficulty or from altered circumstances, might desire to be relieved of their burden, that they should be able without expense to transfer to competent and responsible hands those duties which they can no longer satisfactorily or conveniently discharge. Unquestionably, there exists a widespread desire for some such facilities; and numerous witnesses of the very highest authority expressed decided opinions in favour of enabling those who desired it to place trust funds under the control and management of some public authority, subject always to the right of that public authority to decline any trusts which it might appear undesirable to undertake.

"15. The Lord Chancellor, Lord Halsbury, Lord Justice Lindley, Lord Watson, Lord Maclaren, His Honor Judge Chalmers, His Honor Judge Lea, Mr. Adams, a solicitor of long experience, together with others, gave evidence in this sense. A Bill for the establishment of a Public Trustee was introduced by the late Government in 1890, and passed through the House of Lords, after being carefully considered. It was approved by all the Law Lords, and met with the general assent of that House. It was afterwards introduced by Mr. Goschen, then Chancellor of the Exchequer, into the House of Commons, though it did not reach a second reading. Similar Bills were introduced in the House of Commons by Colonel Howard Vincent and Mr. Warmington. There does not appear to have been throughout, or to be at the present moment, any objection raised to the principle of this Bill except among solicitors. Mr. Cozens-Hardy, a Member of this House, expressed a decided preference for confining the duty of a public trustee to the custody of trust funds.

"16. The Incorporated Law Society deputed two gentlemen, the Incorporated Law Society of Dublin deputed one, and the Associated Provincial Law Societies also deputed one to represent their views. The ground taken in their evidence by all those gentlemen was substantially the same; they did not consider that beneficiaries do in fact sustain such losses from dishonest trustees as would justify the introduction of the proposed change. They considered that any such project would involve additional expense in the administration of trusts; that an official trustee could not exercise the delicate discretion required in such matters, for example, as making payments for the advancement of children or the approval of marriages, and that upon each step he would have to be satisfied by legal evidence at considerable expense of every fact relating to the family history or requirements which would be known without inquiry to a private trustee. Speaking generally, their hostility was directed rather against the administration than against the custody by a public official of trust monies.

17. A further

"17. A further ground of objection was, that though it was proposed to make the employment of a public trustee purely voluntary, yet hereafter, when the expense of establishing that functionary and his office had been incurred, and he was found to be without occupation, Parliament would proceed to make the employment of the public trustee compulsory, in order that officials in the receipt of salaries should not be left without something to do. In this apprehension your Committee are unable to concur, though they entirely agree that any Act for the establishment of public trustees should be entirely optional, except in so far as Courts of Justice in particular instances think fit to appoint a public trustee.

"18. In regard to the other objections, your Committee, while not questioning their good faith, cannot accept them as valid objections to the proposed reform. No one can doubt that the best method of administering trusts is by private trustees, if men can be found competent, honest, and willing. The difficulty arises where competent persons cannot be found, or where persons, believed to be honest, show themselves dishonest. The extent to which defalcations occur has been already dealt with. Experience in Scotland and in New Zealand, to which reference is made later, has not shown that complaint arises on the score of expense, and if proper rules are made there need not and would not be any complaint on that score in England. In the great bulk of trusts no delicate discretion has to be exercised, nor is it obvious why a judicious public trustee should not exercise a wise discretion in such matters, as is constantly done by judges in the case of wards of Court. As regards the alleged necessity of a public trustee satisfying himself by legal and costly evidence of family facts or family requirements, that also has not been found an obstacle either in Scotland or New Zealand. Provisions exist under Judicature Act, 1894, by which rules of Court can be made dispensing with this technical necessity in the distribution of property, and it appears to your Committee that it would be easy to adapt that machinery to the case of a public trustee and avoid the evil which is apprehended.

"19. It appears to your Committee that a case has been made out in favour of the establishment of a system under which private trusts can be administered, if so desired, by or under the control of some official or judicial authority, which should also have the custody of the funds.

"20. The next point for consideration is in what manner, or by what machinery, such a system can best be worked. Upon this point various suggestions were advanced.

"21. Several witnesses advised the establishment of a department, at the head of which should be a public trustee in London, with branches throughout the country. Any person to be at liberty to appoint the public trustee to administer any kind of trust, testamentary or other, and any existing trustee to be at liberty to apply that the public trustee should take over his functions. On the other hand, the public trustee was to be free to decline any trust if he considers it inadvisable or inconvenient to accept it, and to be able, where he thought it necessary, to employ solicitors or other persons familiar with any particular matter which he might undertake, and also to apply, without formality or expense, for directions to a judge in chambers. It was also urged that the public trustee should be able to act in conjunction with a private trustee, the trust property to be vested in the former. The charge for this service to be a commission, regulated by a scale settled by the Lord Chancellor and the Treasury. No immediate appointment of any large number of officials was contemplated, but rather a commencement upon tentative lines with a view to extension as circumstances should require. This was in substance the proposal made in the Government Bill of 1890.

"22. A system of this character already exists in New Zealand. It was established in 1872, and found great favour. Some causes of complaint arose, not apparently of a very serious character. In 1891 a Royal Commission was appointed in the Colony to inquire into these complaints, and in 1894 a Consolidating Act was passed embodying all previous legislation, and including some changes recommended by the Royal Commission. The main features of the Public Trust Office in New Zealand, so far as they relate to private trusts, are as follows: There is a public trustee who has an advisory Board constituted of three members of the Ministry and four other officials. He is not compellable to accept any except a limited class of trusts, but he may accept any private trust. He does not, as a rule, accept trusts which involve a good deal of discretionary work, and declines any trust unless the provision of the deed, will, or instrument allow of an investment of the capital fund in first mortgages of the colony, or in the stocks, funds, debentures, or securities of any British colony, or according to the Public Trust Office Acts. Hitherto larger estates have not found their way, as a rule, into the hands of the public trustee, though the tendency is more in that direction than it was. Only a very small percentage of trust funds are at present in his control. It is in small estates, and especially small intestate estates, that the public trustee has done his most useful work, and we were informed that this institution is much esteemed in New Zealand. At the end of 1893 there were estates in the Public Trust Office amounting in capital value to 1,450,917*l.*, of which nearly one-half were strictly private estates. The population of New Zealand is about 700,000.

"23. A second proposal was made, also, in favour of the appointment of some public official to hold trust property, and administer private trusts, with the option of declining such as he thought fit, but differing in one point of considerable importance. According to this project, the persons to administer private trusts were not to be officials of any department, but were to be officers of the Courts of Justice, under the immediate supervision and control of a

judge. Under the existing law in England, the Chancery Division of the High Court is able, when it thinks fit, to assume and carry out the general administration of any trust estate. Orders for general administration, however, are not readily granted, the matter resting now in the discretion of the judge. Although the cost of such proceedings is less than in former times, it still is sufficiently heavy to be prohibitive in the case of small estates, and probably for the same reason this method is rarely adopted, even in larger estates, unless contentious questions arise which require litigation. One feature of the present system seems to be that any party disposed to be troublesome can inflame the expense of administration. Parties of this disposition abound in Courts of Law.

"24. In the course of inquiry a third method was suggested, or rather suggested itself, after the evidence of Lord MacLaren, one of the Lords of Session in Scotland. Your Committee learned that there is already in existence in Scotland a system of administering private trusts, under judicial supervision, which appears to have worked admirably. The system has grown gradually, and has been extended, so that now what is called a judicial factor can be appointed by the Court, practically, in every private trust, whether in cases of lunacy or intestacy, or death, or resignation of trustees, or of their declining to act. And, if upon the creation of a trust, whether by settlement, or will, or otherwise, or whether of long or short duration, the trustor desired that his intention should be carried out by a judicial factor, the Court is able to make the appointment. The practice is as follows: Upon the application of those beneficially interested in the trust property, or of some only among them, if the Court thinks it expedient, a person usually agreed upon, but sometimes selected by the Court, is appointed judicial factor. He is not an official, but a private individual—generally an accountant. All the trust property vests in him, and he is thenceforth accountable for its investment and administration. He gives security for the due discharge of his duties and receives such commission, varying from 1 to 3 per cent. per annum upon the income of the trust estate, as is fixed by the judge or the accountant of court, and he may employ solicitors or other professional men only where it is necessary. He has to keep regular accounts, which are sent once a year to the office of the accountant of court, and audited. He has to keep a separate bank account for the trust money, and is liable to a penalty and deprivation of office if he keeps more than 50*l.* for more than 10 days in his own private account. He cannot exercise any discretionary power without first making a report to the accountant of court, and if there is any difficulty it is brought under the notice of the judge. If, upon the annual account being submitted, the accountant of court sees any doubtful or unauthorised security, he makes an order for reinvestment. Whenever the accountant of court has reason to suspect anything wrong he can call for vouchers of all the investments, and if not obeyed at once he can call upon the judicial factor to consign the amount in the bank. The judicial factor can prove a will, and if authorised by the Court, as he sometimes is, can carry on a business.

"25. The capital value of the property at present administered under the system in Scotland is about eight millions sterling, which, supposing that the wealth of England were taken as ten times that of Scotland, would correspond to a sum of 80 millions in the larger country. During nearly half a century since this system came into operation no single trust estate has lost anything by the defalcation of a judicial factor. In the few instances of dishonesty which have occurred the loss has been made good by the sureties.

"26. It appears that there is very little difference between the expense of a judicial factory and a private trust. The commission covers a good deal of work, some of it being work which if there were a private trustee would be done by a solicitor and charged for by fees.

"27. Judicial factors are very often appointed in quite small estates of a few hundred pounds, such as may have been accumulated by a successful working man, and the system is largely taken advantage of and gives great satisfaction in Scotland.

"28. In considering what methods would be most suitable for England, the primary conditions of success must be borne in mind. It is indispensable to the success of any system that it should be inexpensive; that those who administer it should be easily and promptly accessible, and personally ready to take the same steps as a sensible private trustee now takes to acquaint himself with all that belongs to the trusts committed to him. Whether the system is to be worked by an official department, or by a Court of Justice, or by co-operation between the two, the individual who on any particular occasion manages the trust must not be separated either by official red-tape or by judicial etiquette from those with whose interests he has to deal. It must be made clear that he is not a person to be approached by formal proceedings either of an official or of a legal character, requiring to be satisfied of the most trifling fact by prolix and expensive proof, but a man empowered and required to use his own judgment, to make any necessary inquiries for himself, and to take the initiative in the interest of the trust either of his own motion or at the request, however informal, of anyone concerned. If such administrators be made available to any who desire their services, the system would be of the highest utility. But if all that can be offered to the public is an elaborate hierarchy of hardly accessible officials or a reproduction of the tedious and costly methods which have disfigured Chancery administration in past time, it would be as well to leave things as they are.

"29. Your Committee have arrived at the conclusion that the desired result might be attained by the employment of suitable persons in each district, who should be subject to judicial

judicial control. The trust funds should be deposited either in Court or with the Paymaster General, no securities being at any time allowed to stand in his name, the holding of which involve a liability; with this reservation any investments authorised by the terms of the trust instrument or by the law and practice of the Court might be permitted. It might be advisable to enable the Court in special cases to allow the trust funds to stand in the name of the person administering the trust, as is always done in Scotland, but then he ought to find security.

"30. It does not appear desirable that the persons appointed to administer trusts under judicial control should of necessity be officials. There ought, indeed, to be in every district an official whose duty it should be to undertake that function when required to do so. Such officials might be from time to time selected by the Lord Chancellor for this purpose from the District Registrars and County Court Registrars in the country, or from the wider range of Court officials in London. Or an even larger field of choice might be left to the Lord Chancellor.

"31. But it ought to be also possible to appoint a professional or other suitable person, such as a solicitor or accountant, preferably on the recommendation of those interested, of whose probity and capacity the Court is satisfied. Such a trustee would frequently know the requirements and affairs of the beneficiaries, and for the sake of his own credit, as well as with a view to further employment of a like kind, would be under an inducement to discharge his duty efficiently. A commission should be charged for these services, upon a scale to be fixed by the Lord Chancellor and the Treasury, sufficient to cover the remuneration of any non-official who might be appointed, and to save the Exchequer from loss.

"32. Whosoever is appointed to administer a trust, whether an official or a non-official person, ought to be required to act precisely as private trustees now act, using his own discretion, and proceeding not as a judge, but as a man of business. But in all respects he should be in the situation of an officer of the Court, able to ask for directions, and bound to obey them, whether asked for or not. In any case of difficulty he should be at liberty, without either formality or expense, to consult the judge, who might, if he thought it necessary, give other parties an opportunity of presenting their views, or informing his mind before giving his directions. Like facilities should be given for hearing any complaint or representation by persons interested in the trust. In short, if these matters are to be under the control of a judge, it is essential that he should on occasion supervise administration without formality. If such supervision is available, it will command the complete confidence of the public, and will secure efficiency. All judges of the High Court, and such judges of County Courts as the Lord Chancellor may from time to time authorise, should be empowered to exercise these powers.

"33. Accounts should be rendered at fixed periods by all persons appointed to administer trusts, and audited officially. Your Committee were much impressed with the advantages of the system of annual audit by the accountant of court in Scotland. They recommend that a similar provision be made in regard to England, and that the official auditor be enabled to make representation to the Court as to any trust being administered under the control of the Court at any time, and may also at any time be required by the Court to investigate and report upon the manangement of any such trust.

"34. It would be not only unnecessary but mischievous to make any such system as is here proposed compulsory. Either those who create trusts, or trustees themselves, should be empowered to apply for administration under the control of the Court, and the Court should be at liberty to decline such administration. Beneficiaries should be enabled to make a like application, but in every case the discretion of the Court should be unfettered.

"35. It would be unnecessary to provide rules for regulating the procedure of the Courts in regard to the administrative as well as the financial side of the proposed scheme. Your Committee consider that much will depend upon the scope and thoroughness of these rules. In particular, they ought to prevent the possibility of litigation at the expense of the trust fund except where absolutely indispensable, and to ensure the disallowance of any expense or outlay by the appointed trustee except where from the nature of the payment or of the work done it was practically impossible for him to avoid it. In view of the fact that both administration and finance will be involved in these rules, your Committee recommend that the rule-making authority should be the Lord Chancellor with the concurrence of the Treasury.

"36. Your Committee recommend legislation upon these lines."

Question, That the DRAFT REPORT, proposed by the *Chairman*, be read a second time, paragraph by paragraph,—put, and *agreed to*.

Paragraph 1, amended, and *agreed to*.

Paragraph 2, *agreed to*.

Paragraph 3, amended, and *agreed to*.

Paragraph 4, *postponed.*

Paragraph 5, *agreed to.*

Paragraphs 6—10, amended, and *agreed to.*

Paragraphs 11—13, *postponed.*

Paragraphs 14—18, amended, and *agreed to.*

Paragraphs 19—21, *agreed to.*

Paragraphs 22—24, amended, and *agreed to.*

Paragraphs 25—27, *agreed to.*

Paragraphs 28—29, amended, and *agreed to*

Paragraph 30, *agreed to.*

Paragraph 31, amended, and *agreed to*

Paragraph 32, *agreed to.*

Paragraph 33, amended, and *agreed to.*

Paragraphs 34—35, *agreed to.*

Paragraph 36, amended, and *agreed to.*

Postponed Paragraph 4, amended, and *agreed to.*

Postponed Paragraph 11.—Amendment proposed, in line 9, to leave out from the words "This, however," to the end of the paragraph, and add the words: "It might, however, be enacted that in all cases of stocks and shares, or cash, being once placed on a joint account in the books of any company or bank, or corporation, the words 'trustees might be required to be added, in all cases in which it was held on trust, and that on the death of all but one of such joint persons, the company, without being required to ascertain the terms of the trust, should not permit transfer or payment until an additional name were added, certified in writing by a duly admitted solicitor to have been duly appointed a trustee of the stock or cash, such certificate to exonerate the company or bank.' All trustees not affixing the word 'trustees' to such account might be made liable unlimitedly. Accounts not so marked the company, &c., to be entitled not to consider as trusts, but the existing process of caveat by any party interested under the orders made under the Acts to be still in force"—(Mr. *Kimber*).

Question, That the words proposed to be left out stand part of the paragraph,—put, and *negatived.*

Question put, That those words be there added.—The Committee divided:

| Ayes, 3. | Noes, 3. |
|---|---|
| Mr. Greene. | Mr. Arthur O'Connor. |
| Mr. Kimber. | Sir Henry Roscoe. |
| Sir Charles Pearson. | Colonel Howard Vincent. |

Whereupon, the *Chairman* declared himself with the Noes.

Postponed Paragraph 12, amended, and *agreed to.*

Postponed Paragraph 13, *agreed to.*

Question, That this Report, as amended, be the Report of the Committee to the House,—put, and *agreed to.*

*Ordered*, To Report, together with the Minutes of Evidence, and an Appendix.

## EXPENSES OF WITNESSES.

| NAME OF WITNESS. | PROFESSION OR CONDITION. | From whence Summoned. | Number of Days Absent from Home, under Orders of Committee. | Allowance during Absence from Home. | Expenses of Journey to London and back. | TOTAL Expenses allowed to Witness. |
|---|---|---|---|---|---|---|
| | | | | £. s. d. | £. s. d. | £. s. d. |
| Charles Henry Morton | Secretary, Associated Provincial Law Societies. | Liverpool - - | 2 | 2 2 – | 3 3 – | 5 5 – |
| Trevor T. L. Overend | President, Incorporated Law Society. | Dublin - - - | 3 | 3 3 – | 5 10 6 | 8 13 6 |
| David Maxton Lewis | Secretary, Public Trustee, Limited. | Edinburgh - - | 3 | 3 3 – | 3 7 8 | 6 10 8 |
| Lord McLaren - - | Judge of the Supreme Court of Scotland. | Edinburgh - - | 3 | 3 3 – | 5 14 6 | 8 17 6 |
| Judge Chalmers - | County Court Judge - - | Birmingham - - | 2 | 2 2 – | 1 18 6 | 8 4 6 |
| | Allowance to Witness for expense of providing a Deputy to sit in Court in his absence - - - - - - - - - - | | | | 4 4 – | |
| Judge Lea - - | County Court Judge - - | Hereford - - | 2 | 2 2 – | 2 7 6 | 8 13 6 |
| | Allowance to Witness for expense of providing a Deputy to sit in Court in his absence - - - - - - - - - - | | | | 4 4 – | |
| | | | | TOTAL - - - £. | | 46 4 8 |

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# MINUTES OF EVIDENCE.

*Monday, 4th March* 1895.

MEMBERS PRESENT:

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| Mr. Attorney General. | Mr. Arthur O'Connor. |
| Dr. Farquharson. | Sir Henry Roscoe. |
| Mr. Kimber. | Colonel Howard Vincent. |
| Sir George Osborne Morgan. | Mr. Warmington. |

MR. ATTORNEY GENERAL IN THE CHAIR.

The Right Honourable The Lord HERSCHELL, The Lord High Chancellor (attending by special permission of the House of Peers); Examined.

*Chairman.*

1. I DO not know if your Lordship has got our Order of Reference?—I have not seen the exact terms of it; I know the general nature of the question.

2. It is quite short and I may as well read it. "That the Select Committee be re-appointed to inquire into the liabilities to which persons are exposed under the present law as to the administration of trusts, and whether any further legislative provision might be made for securing adequate administration of trusts, without the necessity of subjecting private trustees and executors to the risks which they now run." There have been, I think, as I daresay you know, Bills before Parliament, notably two Bills, one of them introduced in 1891 by the then Chancellor of the Exchequer, Mr. Jackson, and the Attorney General; and another introduced in the first instance in 1890, and afterwards again in 1893 by Colonel Howard Vincent, Mr. Warmington, and Mr. Hobhouse?—Yes; I believe the Bill of 1891, introduced by the Chancellor of the Exchequer, the Attorney General, and Mr. Jackson, was very nearly a copy of the Bill that had passed the House of Lords, I think, in the previous Session. It was introduced by the late Lord Chancellor and referred to a Committee in the House of Lords. It was a good deal altered in Committee, and, substantially, the Bill introduced in the following year by the Chancellor of the Exchequer was the Bill as it had passed the House of Lords. I have not examined them very carefully, but, so far as I have observed, the only alteration was this: that whereas I think the Bill, as it passed the House of Lords, proposed that public trustees should be appointed by the Lord Chancellor with the concurrence of the Treasury,



*Chairman*—continued.

the Chancellor of the Exchequer's Bill proposed that public trustees should be appointed by the Treasury with the concurrence of the Lord Chancellor; but, except for that alteration, so far as I know, the Bills were the same.

3. Can you express any opinion as to whether there are considerable losses caused to *cestui que* trusts by defalcations or dishonesty of trustees?—I have no doubt that the losses are very considerable indeed. I have, of course, no means of accurately determining their number, but I think I can give the Committee some information which will show how considerable they probably are. Not uncommonly breaches of trust by solicitors who were acting in the capacity of trustees have come before the courts on complaints about the conduct of solicitors. It is only a limited proportion of those that come to the Lord Chancellor's notice, namely, those cases in which the solicitor has been a commissioner for oaths; all those cases, when they come before the courts, are immediately reported to the Lord Chancellor. In the last 10 years, from 1885 to 1894, the commissions were superseded in the case of 77 solicitors on account of misconduct, of whom 14 had committed breaches of trust as trustees or executors. Those are only the solicitors who held commissions to administer oaths, who are, of course, only a small proportion of the whole. Now, there is no reason to suppose that those who hold commissions would be likely to be implicated more than others; therefore, that would indicate in the case of solicitors alone a very considerable number of cases of breach of trust. Of course, there are such cases, as one knows, that do not even come before the courts at all, much less before the Lord Chancellor. Complaints are

*Chairman*—continued.

made to the Incorporated Law Society, and there is a threat of proceedings in court, and ultimately some sort of restitution is made, or some arrangement is made, sometimes by paying the whole of the amount for the purpose of avoiding proceedings. So that I think it cannot be doubted that even in the case of solicitor trustees, dealing with them for the moment alone, the number of instances of breaches of trust is very considerable ; and, of course, those breaches of trust, as we know, are not confined to solicitors, but cases constantly come before the courts of lay trustees who commit breaches of trust of the same description ; therefore I cannot myself entertain any doubt that the number of those cases, and the consequent loss, is considerable.

4. As regards the case of solicitors the Incorporated Law Society might, no doubt, be able to give us further information?—I should think they could, because of course they would know the number of complaints that were before them; and they know very often what results. I may say that I am aware that to some extent, at all events, that is the case ; because, when an application is made by a solicitor to be appointed a commissioner to administer oaths, the name is always sent to the Incorporated Law Society, and in some cases they have laid information before me for the purpose of showing that it would not be a suitable appointment, and the nature of that unsuitability has been that moneys were not paid until proceedings were threatened or imminent; so that I have no doubt that some information could be afforded by them.

5. As regards defalcations by trustees who were not solicitors, could your Lordship suggest to us any means of getting, if it is possible, any particular or statistical information?—I do not know how that could be obtained unless by the records of the courts when the cases come into court.

6. In the case of defalcation, unless there is misconduct already proved, or a probability, from evidence of misconduct on the part of a trustee, the courts, I believe, cannot practically remove any person from a trust, notwithstanding that his general character may be not altogether reliable?—I believe not.

7. I suppose it is, one may say, common knowledge that private persons, and especially poor persons, are obliged to rely very often upon very questionable persons as trustees ; they are not in a position to get any one who is thoroughly reliable ; do you think that that is so?—I should think that it probably would be so; but then, in those cases, the proportionate number of trusts is very much smaller. I should think that there are not a very large number of small trusts.

8. I am thinking chiefly of the case of executors of wills, which are trusts in law?—No doubt in the case of executors that is so.

9. There are, I believe, certain powers in the Court of Chancery for dealing with trust properties ; in the case of minors, for instance ; a minor can be made a ward of court?—Yes.

10. That is, I believe, only on the payment of a certain sum of money ; I think 100*l.*?—There must be a sum paid into court to make a child a ward of court.

*Chairman*—continued.

11. In that case the ward of court is protected by the authority of the court?—Yes.

12. Do you see any reason why a protection of that character should not be extended to persons who are not minors for the administration of trusts generally in the case of people who desire to have recourse to the court; I do not mean the parental protection that is afforded to minors, but the protection of property and the administration of property under the direction of the court, where the persons are themselves desirous that the property should be so administered?—I do not see any objection to that, unless it be on the ground of cost.

13. There is means, of course, now of having estates administered in Chancery?—Yes.

14. But is that a very costly proceeding?—It is not as costly as it used to be. There has been a great effort made to lessen the cost, but there is no doubt that with reference to small properties the cost is still in many cases very great. Lately there has been an effort to make an improvement even in those cases by requiring less strictness of legal proof of death, and other matters of that description, which have often caused really the absorption of the whole of small estates, and I hope that that may work well. If it does, I think the evil will be considerably less than it has been, though probably it will not altogether cease.

15. There is at present no public trustee, or no person occupying a position that might be described as that of a public trustee, in this country?—No; and, personally, I have for a long time been anxious to see such an official exist, not only on account of the losses that are sometimes sustained under the present system, but because of the extreme gravity of the burthen of trusteeship. So long as there is no public trustee it is difficult often to refuse to be a trustee; and yet nowadays the burthen of trusteeship is felt to be such that it is not always easy to obtain the services of suitable trustees. People are much less willing, I believe, to be trustees than they were formerly; and I think that that is likely to increase rather than to diminish.

16. The court is very strict, is it not, in dealing with trustees, in making them reimburse any losses caused by injudicious, or, at all events, illegal, investments, even although they acted in the most complete good faith?—Yes. I introduced a measure, which became law, which relieved them, but only, I think, to a very small extent; and, personally, I should not be indisposed to see that legislation carried further, although I know that there are many who feel that it would be very dangerous to relax at all the stress of the present law upon trustees.

Sir *George Osborne Morgan.*

17. What is the date of your Act?—It was passed about three or four years ago. It is the Trustee Act; it enabled the Statute of Limitations to be pleaded in certain cases, and it provided that if certain reports had been obtained of valuers the trustee should not be liable. It mitigated in several respects the position of a trustee.

18. Would

*Chairman.*

18. Would you limit the public trustee to accepting merely those trusts that were remitted to him by the court, or to those cases in which he was requested by will, or by private individuals, to become a trustee?—I should allow any person to appoint him trustee, either under a trust as *inter vivos* or by will.

19. Would you think it desirable to allow him to refuse to accept trusts, subject, of course, to the control of the court, where they involved the management, for example, of a business or the management of estates, or such duties as he could not perform?—Yes, I think it would be essential to permit the trustee to refuse, and perhaps to compel him to refuse, trusts of that description.

20. Experience, of course, would perhaps enable him to extend his operations afterwards?—It might be so; but those really are a very small proportion of the total number of the trusts.

21. Would you think it desirable to enable private trustees, persons appointed under a will, or appointed under a deed, under settlement, for example, to add the public trustee to their number for the purpose of protecting the property, or for the purpose of shifting to some extent their own responsibility upon him?—I think that that would be a very desirable thing; it would certainly relieve the trustees from the pressure to which they are sometimes subjected now, to consent to a breach of trust when the income is very limited and the necessities of the family considerable. Trustees, as experience proves, have in such cases not found themselves able to resist the pressure, and have consequently become liable to serious pecuniary responsibilities.

22. In regard to the expense, I suppose that a considerable part of the expense now involved in the administration of trusts in the Court of Chancery is due to the litigation in court, owing to the fact that different interests come and are represented, and matters are often fought out adversely in court before the judge?—Yes; in a very great many of the cases, probably a considerable majority of the cases where trusts are administered by the court, there are questions arising between parties having adverse interests.

23. Do you think it would be practicable to enable the public trustee, if one were appointed, to take the direction of the judge, or to ask a decision of the judge as to construction of law, subject, of course, to an appeal by any person who might be aggrieved or think himself aggrieved?—I see no objection to that.

24. Would it, do you think, be advisable to give wider powers to the court to transfer trusts to the trustee, if one were appointed, without requiring any very strict proof of misconduct or apprehended misconduct, if they thought that in the general interests of the trust it was desirable that a public trustee should administrate it?—Yes; but I think that that would need to be limited in some way or other; otherwise it would create a good deal of opposition. I think that there would be a jealousy of the absorption of private trusts, or rather of estates vested in private trustees, by the public trustee; it would



*Chairman*—continued.

be said to be another large step in the direction of officialism, and I think that it would weight any measure that was proposed considerably, unless, as I say, it were carefully guarded and limited.

25. If a public trustee were appointed, I suppose that in a very short time the law and practice would become very familiar in the office of the public trustee, and he might by that means save a great deal of the cost of legal advice and supervision which is required now in the administration of trusts by private trustees. Do you think that that would be the case?—I have no doubt that it would to some extent; but I should say that in the enormous proportion of the trusts no questions at all arise.

26. It is a mere matter of administration?—It is a mere matter of administration, and the simplest administration, providing for the payment of the interest or dividends to the persons entitled to them.

27. Have you at all considered whether there should be one central public trustee, or whether there should be any subordinate trustees in different parts of the country, so as to extend the thing locally?—I think it would be found desirable to extend it locally. Whether it be by one trustee with subordinates in the principal localities, or by more than one trustee, I have not considered. My impression would be by one trustee with subordinates in the principal localities.

28. Would it be possible, do you think, to utilise the county court system for that purpose with the registrars; or do you think that their duties are already sufficiently heavy to preclude any proper addition to them?—My impression would be that it would be more easily done by utilising the registrars of the High Court. In all the larger places where you would desire to have trustees there are registrars of the High Court, and I think that, probably, that might be simpler than by making a selection of the registrars of the county courts.

29. Would there be any difficulty, do you think, in the Lord Chancellor, with the consent of the Treasury, making all the necessary rules for the purpose of carrying out the administration of trust property under such a scheme?—I think not. I think it would be desirable that they should be laid before Parliament, so that there should be a distinct sanction of them, unless they relate merely to matters of detail.

30. I do not know whether you have considered the question of cost, whether it would be likely to impose any burthen, practically, upon the Exchequer?—I should think not. If the majority of trusts of a simple character came to be, as I think they would be, administered by the public trustee, the amount of money put in trust is so very large that I think a very small charge indeed, one which would not be at all felt, should be quite sufficient to pay the expenses of the public trustee. But, of course, that must be in process of time; the trusts can only come to him gradually; probably there would be no wholesale handing over of the existing trusts to him; but ultimately I should apprehend that the whole expense of the office could be met, without any loss to

*Chairman*—continued.

the State, by a charge which would be no burthen to the trust.

31. You contemplate a gradual process, allowing the work to increase normally according to the demand?—Yes. I think I should not hesitate to allow existing trustees to make over their trusts to the public trustee, subject, probably, to an application to the court, if the *cestui que* trusts objected to that course.

32. In the case of *cestui que* trusts that were not *sui juris* I suppose that the court's consent must be obtained?—Yes. I think that in that case probably it would be well that the court's consent should be obtained.

33. You referred to the Bill of the late Government, with which, no doubt, you are familiar?—Yes.

34. That represents, I think you told us, the result of inquiry by a Committee of the House of Lords?—Yes.

35. Did it meet with general concurrence in the House of Lords?—Yes, quite so.

36. And it passed through the House of Lords?—Yes.

37. I suppose that, broadly speaking, the Bill is one of the character that you approve of?—Yes; certainly.

38. I do not perceive that there is much distinction between it and the Bill of Colonel Howard Vincent; but if there are any points of distinction, Colonel Howard Vincent will be able to ask your Lordship about them?—No doubt.

Sir *George Osborne Morgan.*

39. The learned Chairman has asked you whether you would approve of the protection which minors have in the Court of Chancery being extended to adults; but surely any person, whether a minor or not, who is interested under a will or a trust can apply to the Court of Chancery for administration?—Certainly.

40. So that that protection is there already?—Yes.

41. Then, upon the question of construction of law, you are, of course, aware that under Lord St. Leonard's Trustee Act, 1860, any trustee can, at a very small expense, present a petition to the court, or apply by summons in chambers, and obtain the opinion of the court upon any question of law?—Yes.

42. Or, in fact, any question of administration or law?—Yes; I do not think myself that the appointment of a public trustee is of any great importance merely for the purpose of diminishing expense of the kind that you are now referring to.

43. Section 30 of the Act of 1860, I think, applies to cases not merely of questions of law and construction, but to questions of administration?—Yes.

44. So that, in fact, a trustee who is in any difficulty can, by simply presenting a petition to the court, or a summons to be heard in chambers, obtain absolute protection for himself; is not that so?—Yes; but of course very often the difficulty and the danger does not occur or appear until afterwards. If a trustee were in every case to take the opinion of the court before acting, for his protection, the effect upon the trust as regards expense would be rather serious.

Sir *George Osborne Morgan*—continued.

45. With regard to the removal of a trustee, surely the court exercises some discretion. If it was found that a man was from his conduct or character notoriously unfit to be a trustee, the court would remove him?—For misconduct, I apprehend.

46. Not merely for misconduct in the trust, but for his general character?—I should think so. If he had been found to have misappropriated other trust moneys, I should think that that would be sufficient, without his having done anything in the case in question.

47. Under the Act of 1850, Headlam's Act, a new trustee can be appointed in cases of bankruptcy?—Yes.

48. And in the case of a trustee going abroad, and I suppose in any flagrant case of incompetency?—Yes.

49. You spoke of the cases in which breaches of trust had been brought to your notice; but I suppose that the number of breaches of trust that never come to light are enormously larger, in proportion, to those that do?—Yes, I should not doubt that.

50. You do not remember, as I am sorry to say I do, the old state of the law when I was a student when a suit for administration generally lasted some 10 or 12 years, before 1852: I just recollect that. In those days practically breaches of trust were committed every day, and the expenses of a suit were so enormous that unless the estate could bear it they were simply acquiesced in?—Yes.

51. I think Lord Romilly refused to appoint a relation a trustee because he said that all breaches of trust were committed by relations?—I have no doubt that they commit their share, but I do not think by any means that breaches of trusts are committed exclusively by relations.

52. But Lord Romilly was a man of great experience, and I think you may take it from me, that he refused in a case in which I asked him to appoint a relative, because he said that nearly all breaches of trust were committed by relations?—I have no doubt that the relatives are probably as a class more likely to succumb to the pressure of the nature that I have described than strangers are.

53. Speaking of the long delay and the enormous expense of the old Chancery suits in old times, the expense of administration has been very much reduced, has it not?—It has been very much reduced, but I am sorry to say that there are now cases, especially where inquiries have to be made, which have lasted a very considerable time, and where I have had complaints that when a matter has been finally settled there is hardly anything to divide. That unfortunately continues to the present time.

54. I think I understood you to say that some of those inquiries which lead to very great expense, as to deaths, and so on, might be very considerably reduced in number?—Yes, I think so. The late rules, I hope, may effect that reform.

55. Of course, now administration suits are carried on almost entirely in chambers, are they not?—Yes; and the cost of them has no doubt been largely diminished.

56. And a good many are taken into the county

Sir *George Osborne Morgan*—continued.

county courts, as you are aware, no doubt?—Yes.

57. The county courts have jurisdiction up to 500*l.*, I think?—Yes.

58. Do you think that that jurisdiction might be extended?—I am hardly in a position to judge of that.

59. Still that has no doubt tended to decrease the expense very much?—Yes.

60. My honourable and learned friend asked you about the fees that would be charged; of course those fees would come out of the estate?—Yes.

61. At present the trustee can charge nothing except the costs out of pocket?—No, unless he is specially authorised to do so, which is not often the case.

62. In the case of solicitors appointed as trustees, they are generally authorised to do so, are they not?—Yes.

63. Are there not some public companies which undertake the office of trustee?—Yes, and that has been very largely done in the United States, where there are, I believe, some life offices of the highest character which undertake duties of that description, and it has been done also in some of our colonies.

64. And I think it has been done in England?—Yes, there are such companies in England. At present they cannot act as executors or administrators, which has hampered their operations considerably.

65. But they can act as trustees?—They can act as trustees.

66. Are you aware of any case at all where any injury has been done to the trust estate by those companies undertaking the trust?—No, I have not heard of any.

67. You were speaking of the United States; I do not know anything about the United States, but I believe that in India there is a public trustee, filling very much the position that this Bill would give a trustee in England, is not that so?—I do not know. Perhaps you can tell me what he is called.

68. I have been told that it is so?—There is an Administrator General. My impression is that those are his functions.

69. I believe that is so; I suppose that when you spoke of an application to the Court to throw upon the public trustee the duties assigned to him, that application would be made in chambers?—Yes, I should think so.

70. And that would be, comparatively speaking, a very speedy and inexpensive process?—Yes.

71. Might I ask to what extent and in what direction you would propose to extend the protection at present given to a trustee?—I should myself like to see a trustee dealt with as other agents are, responsible only if he has not behaved with ordinary care and prudence; but I know that that would be going a very long way. I have never, myself, seen why a trustee should be dealt with so differently from another gratuitous agent, and made responsible, although he may have used every care that an ordinarily reasonable man would use, because he happens to have made a mistake. But it is too well settled, of course, to question that such is the law. I only



Sir *George Osborne Morgan*—continued.

say that, personally, I should like to see the position of a trustee made to correspond much more with that of other gratuitous agents.

72. At present the opinion of counsel, which is a protection to solicitors, is none to trustees?—None.

73. Would you go so far as to say that if a man obtained the opinion of counsel of eminence or of certain standing, and had *bonâ fide* acted upon it, that should exonerate him from the consequences of a breach of trust?—If he had acted under circumstances which would have satisfied any reasonable man that he acted reasonably I cannot see, in the nature of things, why he should be made liable.

74. I think that at present a solicitor, if he obtains the opinion of counsel, and *bonâ fide* acts upon it, is saved from liability to his client?—I do not think that is absolute; it does not go quite so far as that.

Mr. *Warmington.*

75. There is a difficulty, you say, in obtaining new trustees?—I think so.

76. And trustees are jointly and severally liable for any breach of trust committed by any one of their body?—Yes.

77. Does that operate, do you think, to prevent a man, or to make him hesitate in accepting an office in which he will be liable not only for his own action but for the action of his co-trustees?—I should think it does. Of course there might be an act of a co-trustee which would not render him responsible; but, unless he really looks after everything himself, he cannot escape liability; he cannot leave it safely to his co-trustee.

78. With regard to breaches of trust are there any statistics that you know of which show the amount of property in this country which is held in trust?—I do not know of any.

79. Do you think it would be an exaggeration to say, as I have seen it stated, that one-tenth of the property of this country is held in trust?—I should have thought that probably it might be as much as that; but it is very difficult to tell because the amount of property which consists of the aggregation of very small properties is enormous; and of course it is not those very small properties that are generally held in trust. I should not like to give the figures because I could not give them at the moment accurately, but I have seen them. One knows that the total of estates under 10,000*l.* left in each year by persons dying aggregates to an enormous sum.

80. The two causes which, as I understand you, would lead you to an opinion in favour of appointing a public trustee, would be the readiness with which a trustee could always be found and the absolute security of the trust fund?—Yes.

81. Against that it is urged that it would be an increase of officialism, and I should like to hear your Lordship's answer to that?—So far as the public trustee merely took the place of private trustees, I do not think that that is an officialism to which anybody could reasonably object; it really is not officialism properly so called. The officialism objected to, I understand,

to

Mr. *Warmington*—continued.

to be the doing by the public or by a public officer of that which other people in some calling or profession do for reward; that is the officialism I understand to be objected to. Of course so far as you substitute merely a public trustee for a private trustee there is no officialism of that nature. Where I think the objection would be taken is this: that where legal advice is now required, or assistance of any kind, as from a surveyor or accountant, or banker, the trustees select their own solicitor or banker or accountant or surveyor; but if you had a public trustee and that public trustee were left to an official solicitor and surveyor and banker and accountant, then no doubt you would get an increase of officialism by substituting persons selected by a Government Department for those now selected from amongst a large body of persons carrying on those callings or professions.

82. Another objection is urged namely, by what in the public trustee would you replace that individual and personal knowledge frequently possessed by the trustees of the beneficiaries and their needs and their circumstances?—I think that in cases where a discretion was to be exercised for the good of the beneficiaries, the public trustee would not be in all cases a suitable substitute for a private trustee. I think that those would be cases in which you should either leave the matter to private trusteeship, or at least that you should join a private trustee with the public trustee, leaving the public trustee only as a security for the safe administration of the trust.

83. Again as to the expense, do you think that the expense of a trust estate being vested jointly with other trustees, or solely in the public trustee, would be greater to the trust estate than it is now with private trustees?—I think it would be so far greater, that the public trustee would require some remuneration, which must be found somehow or other.

84. Then, as a compensation for that extra expense, there would be the absolute security?—Yes, and as I have said, if you had a very large number of trusts, the work in the great majority of cases is of so simple and routine a character, that it would be amply compensated by a very small fractional charge.

85. It has been suggested that part of the difficulty in obtaing private trustees would be met by allowing private trustees, as part of the general law, to claim a remuneration. Do you agree to that?—I doubt if that would do much. I do not think that the class of persons who at present act as trustees largely, would be any more willing to undertake the duty for the very small remuneration that they would receive; and it might result in an inferior class of professional trustees, which I think would be certainly very much less desirable than a public trustee.

86. In the scheme of the Public Trustee Bill introduced by Lord Halsbury, and afterwards by the Chancellor of the Exchequer, you are aware that the public trustee was enabled to hold shares in Joint Stock Companies as part of the trust estate?—Yes.

87. Whereas a private trustee who holds such shares is liable, as you know, not only to the extent of the trust property, but for his own property?—Yes.

88. In the Bill of the late Government the public trustee's liability is limited to the trust estate; have you any observation to make upon that; it seems to put the public trustee in a position of advantage?—I should think that it would require consideration whether it was possible to allow him to hold shares in a bank, without, in reference to other shareholders, being subject to an equal liability with any other shareholder.

89. There was one objection that your Lordship made that I should like to hear an explanation of, namely, that you would exclude from the office of a public trustee a case where business had to be carried on; as a matter of fact, businesses are carried on by an official receiver, are they not, with a view of ultimately beneficially realising the best price?—They are; but that, I think, is a policy which is a good deal open to question, and it is one that, personally, I should not desire to see extended.

90. Then you would not desire to see a testator's business continued by a public trustee?—Certainly not.

91. In India, I think, the Administrator General is the legal personal representative of everyone who dies intestate?—I really do not know enough of the system to be able to speak to it at all.

92. Have you come across, or has there been under your notice, any case in which a public company in England has acted as trustee or executor?—Yes, the Trustees and Executors Company act as trustees and executors.

93. I know they are willing to act, but have they, in fact, acted so far as you are aware?—That I do not know much about, but I believe they have acted to a considerable extent. I think that I have read in some of the reports of investigations which have taken place into their proceedings, that that part of their undertaking had been conducted successfully, but that is all I know about it.

94. But you appreciate the distinction between trustees for semi-public purposes, like trustees for debenture holders, and trustees of a private estate?—I believe that to some extent they act as trustees for a private estate.

95. You would not suggest, would you, that the public trustee should interfere with charitable or religious trusts?—No.

Mr. *Kimber.*

96. Is there any reason to suppose that the proportion of defaulting trustees, having regard to the serious penalties affecting them, is greater than the number of defaulters in any other class of accounting persons; would not the tendency of those severe penalties against defaulting trustees rather be to make the proportion of defaulters less than the defaulters in other classes of accounting persons?—Yes, it might be; but it is very difficult to say whether that result has followed. Of course, it must be remembered that trustees have often facilities for committing breaches of trust which other persons who have to account have not. They are acting for women and for children very generally.

Mr. *Kimber*—continued.

97. Bankers have as great facilities for committing breaches of trust, I imagine, as any trustee has?—I do not know; it is very difficult to judge of the proportion of bankers that have been guilty of breaches of trust; the number is so small that you could hardly compare the two classes, I imagine, to get the proportion.

98. There are, of course, no statistics extant by which that could be ascertained?—I should think not.

99. Assuming, as I will take the liberty of doing, that the penalties imposed upon trustees are very much more severe than in the case of other defaulting accounting persons, is there any greater reason for the intervention of the State for the protection of the sufferers among the class of persons who would suffer by the default of trustees, than for intervening to protect them from defaulters in any other class?—Of course, the trustees are acting in a much larger proportion for persons whom the law regards as not so well able to look after themselves than other accounting persons are. The object of trusts is very largely, of course, to provide for children, and the persons who ordinarily account probably have a very much larger proportion of their duties towards adults.

100. Do you think that the proportion of women and children, for instance, deriving benefit as beneficiaries under trusts would be more numerous than the proportion of wives and children of persons interested in joint-stock banks and the other great commercial enterprises of the country?—I should think so.

101. On the point of the difficulty of getting private trustees, do you not think that that difficulty arises in a great measure not only from the trouble and risk, but also from the fact that private trustees are, by a sort of custom of our society, expected to act for nothing, and that the disinclination would be very much got over, even among family trustees, if they were allowed to charge?—I rather doubt that, because after all, the charge, unless it is to be a very burdensome one, must be a very small one; and in ordinary cases of trust I do not think the amount received from a small percentage on the income distributed would remove the difficulty which any man feels (if he feels it) to becoming a trustee.

102. You have not, perhaps, had any trust before you in which the trustees have been remunerated by a percentage upon the actual payments to their beneficiaries?—I think I have known of such a trust.

103. I may say that in my experience I have constructed trusts of that kind, and I have found that that has a tendency to remove a great deal of the disinclination of members, even senior members of a family, in getting them to undertake what would otherwise be possibly a payment out of their pockets instead of into it?—I should have doubted whether a person to whom the percentage (unless, as I say, it were a considerable sum) would be a consideration would be a very desirable trustee.

104. Taking the analogy of the management of public companies which, as regards directors, is certainly a kind of fiduciary office, is it not found a wide experience that even the moderate attraction of directors' fees is sufficient to induce



Mr. *Kimber*—continued.

men to take a post which they otherwise would certainly not take?—Yes, it is, in some cases. No, doubt, if you had a trustee receiving a small percentage, in a number of cases it would be worth his while; but then the same people are not often employed in very many trusts.

105. But are not the subject-matters of trusts generally estates or funds, not of very small amount, but of very considerable amount?—Well, a great many of them are of a comparatively small amount. I should say that you have a very large number of trusts of from 2,000*l.* to 5,000*l.* I am referring, of course, to trusts on marriage; trusts on marriage are often for a comparatively small amount.

106. I think you have already stated that you would allow trustees to get relieved of their trust *ex mero motu*, subject to a judge in chambers?—Yes.

107. And without the consent of their *cestui que* trust?—I would, as I said, allow their *cestui que* trust, if they objected to take the opinion of the Court.

108. As regards the subject-matter of a trust, you have already said that as regards the share in a business or management of a business, you would not allow the official trustee to take that?—That would be my opinion.

109. Then as regards his holding shares in banks, which, as you know under the present law, must necessarily be subject to a very heavy liability, would you allow him to take those over, and I may brace with that, insurance offices, which are subject to a similar regulation?—I see great difficulty in permitting him to be subject to any less liability to contribute to the assets of a company than any other shareholder; if the estate were such as to afford him a complete security for the total liability to which it was possible for him to be subject, then I should see no objection, because, of course, the estate would be liable in any case, and if the rest of the estate would be sufficient to cover all possible liability of that description no difficulty would arise.

110. You would draw the line then at that point, that if the rest of the estate was sufficient to indemnify him against the maximum liability upon the bank or insurance shares, he might be allowed to take them, and if it was not sufficient you would not allow him to take them?—Yes.

111. Then, at all events, there would be one class of cases that would be excluded from the permissive powers of this Bill?—I think there might be several. I have alluded to the carrying on of business, the managing of a concern which would require something more than mere administration.

112. Should liability arise you would propose that the State should bear it?—Liability for what?

113. On the bank shares or insurance shares?—No, because I would not allow any possible liability to rest upon the State.

114. But possibilities in this world may at one period seem impossibilities; the value of an estate may decline, as we have seen in notable examples; supposing that the value already estimated, when the trustee takes it, appears sufficient to guarantee the maximum liability, it might

Mr. *Kimber*—continued.

might afterwards depreciate, might it not?—Yes.

115. Supposing that that event did arise, and the liability accrued, would you propose that the State should bear it?—I should; but I never should allow it unless there were no substantial fear of such liability. If that were done I think the burthen upon the State would not be worth considering; it would be so small.

116. To whom would you leave the question of the valuation of an estate?—I think that wherever a trustee proposed to hold bank shares, for example, the Treasury should be satisfied that the estate was ample. I think if they were satisfied one would safely leave it there.

Sir *George Osborne Morgan.*

117. The Bill of the late Government provides that the public trustee is not to be liable to pay any debt, or discharge any other liability, unless he commits a breach of trust, except so far as it is trust property?—Yes; but I was saying that if the public trustee were to hold shares on which there was a further liability, I see very great difficulty in maintaining the position that because he is a public trustee the other persons interested are to have less assets to look to than they would otherwise.

Mr. *Kimber.*

118. Supposing a case, which is a common one in my experience, of a farm—an old farm, being left by a farmer, whether freehold or leasehold, sometimes both, to his sons as executors, or to other trustees, uncles, to manage for the interest of his family, that would be a class of cases which you would not allow public trustees to take?—I think there might be a good many cases, in which the management of land was involved, which would be unsuitable for a public trustee; and I really do not think that it is as regards those that the difficulties and dangers arise.

119. The official trustee would have the same right of going to a court upon questions of construction of the trust as private trustees have now, of course?—Yes.

120. Do you not think that in the case of an official trustee, whose first duty would be the safety of the estate liable behind him, there would be a tendency on his part to seek the intervention of the court more often than a private family trustee now would be disposed to do?—I think that might be so.

121. And consequently larger expense?—I do not think it would necessarily be larger expense, because he might do it as part of the duties of his office.

122. But he would have to act as solicitor and counsel?—No.

123. Do you propose that he should engage solicitor and counsel?—No; but you would not need a solicitor and counsel in every case in which the assistance of the court was sought for directions.

124. But, at all events, he would do those duties you would propose, which a solicitor and counsel are now employed to do?—No, certainly I should not say so, where it was necessary to employ solicitor and counsel; but what I was thinking of was that in cases where you suggest

Mr. *Kimber*—continued.

that he would more readily go to the court than a present trustee does, he might seek the opinion of the Court himself in a more simple fashion.

125. And he would be a witness as well as advocate?—They are not really cases which require a witness or an advocate at all.

126. They require some evidence of fact, surely?—In those cases I apprehend he would employ a solicitor or counsel just as now, but there are many cases that do not require evidence of facts at all.

127. But, at all events, there would be cases in which he must employ solicitor and counsel?—Yes.

128. That would be necessarily the employment of an official counsel and solicitor, would it not?—The suggestion made in the Bill was that there should be power in the creator of the trust to nominate a solicitor to the trust.

129. And counsel?—The solicitor would select his counsel, of course.

130. As regards the banker, then?—I think there was a similar provision with regard to the banker, that the creator of the trust might nominate the banker.

Mr. *Warmington.*

131. That is Clause 12?—Yes.

Mr. *Kimber.*

132. Then, as regards the discretionary powers in reference to investments, supposing that the *cestui que* trust (as we often find in experience) wanted their trustees to invest in a class of security which appears respectable, and gives a yearly interest larger than consols, and other gilt-edged securities, where would you vest the discretion in that case. Where there are two cases, one, we will say, a gilt-edged security, like consols, and the other another good security in the market, and within the terms of the trust, and the *cestui que* trust desires the one which yields the larger rate of interest, where would you vest the discretion?—It would have to be vested in the trustee; although I do not know that there would be any insuperable objection, if the *cestui que* trust objected that the trustee was not investing in the more advantageous security which was within the trust, to allowing the *cestui que* trust to make application to the Court in such a case.

133. More expense would then be incurred, would it not?—No doubt.

134. Then take the case of a common discretionary power of trust of advancement to children and maintenance, you would vest that discretion in the official trustee?—Yes, unless his appointment were a conjoint appointment with another trustee, which was what I suggested as in that class of cases probably the suitable course.

135. But, supposing you brace them together, the official trustee and the private trustee; you would exempt the official trustee from responsibility while making him the controlling party in the acts of the other trustee?—Yes; I think that was the proposal.

136. Do you not think that objectionable in principle. Is that not leaving the discretion still outside the officia ltrustee and vesting it in

one

Mr. *Kimber*—continued.

one instead of two?—I do not see any objection to that. I do not think there has been any serious abuse of the exercise of discretion. If it were only a question of the exercise of discretion I should be quite content with existing trustees.

137. Then in the exercise of these family matters, as the official trustee would necessarily not know the circumstances of the family himself, upon what evidence is he to go; what is the nature of the evidence; are any persons that assert themselves to be interested to be at liberty to go and give a *vivâ voce* statement to him in the absence of others, and so on?—That would have to be regulated, of course, by rules. I do not see that there would be any serious difficulty in that.

138. Perhaps you have not considered that point?—I have not considered that point; but it does not strike me that there would be any serious difficulty in that.

139. This being entirely a parental business undertaken by the State, and there being subjects of the realm who are conducting this very same business, is that not the State entering into competition with its own subjects?—I do not think there is any class conducting this business, unless it be those trust companies which have just begun to do so. Trusteeship is not a business at present in England.

140. There are several very respectable companies now in existence which are unimpeached?—If the testator or a settlor preferred a company to the State I, of course, would not interpose any obstacle in the way of his appointing a company instead of the State.

141. Except the competition of the State, and therefore it would be a question of terms, would it not. For instance, what would be the percentage that you would propose to charge for the State for managing these trusts?—Some might prefer the State and some might prefer the company. The Bank of England competes with all bankers, but has not a monopoly; everybody may deposit their money and bank with the Bank of England if they please; but they do not.

142. At any rate, it would be a powerful competitor on very disadvantageous terms to all others?—But when it is said that it would be a competitor, it would be a competitor with a class of business that has not existed until quite recently; and I do not think it has any very extensive operations now.

143. In the first instance, at the first institution of it, you contemplate a loss to the State?—I think there might be some.

144. At all events, whether the State would be a loser or not would depend upon the amount of business which it could attract?—I do not know that I should use the word "attract," because that looks as if the State would endeavour to get business, which I do not know that it would.

Dr. *Farquharson.*

145. Has the proposal ever been made to place all trust business of this kind compulsorily in the hands of a State official and to abolish the office of private trustee altogether?—Not so far as I am aware.

146. You would not, as I gather from your evidence, be in favour of such a proposal?—No, certainly not.

Dr. *Farquharson*—continued.

147. I suppose when the office of public trustee is appointed it will practically amount to the abolition of private trusteeship?—I do not think so; I think that a great number of persons would still prefer to have their private trustees.

148. I think you have pointed out that the difficulties and dangers of private trusteeship are rather likely to increase than diminish in future?—Yes, I do not expect them to diminish.

149. Do you think that the expense of this new functionary would be so great as to press inconveniently upon small trusts?—I do not think so.

150. I see that in one of the Bills the public trustee appears to have a very wide discretion to decline absolutely, or, except upon prescribed conditions, to accept any trusts; might there not be difficulties and inconveniences in giving a public trustee such wide discretion to refuse this class of business?—I think it would be desirable to lay down broadly the lines which are to determine whether he is to accept or refuse.

Mr. *Arthur O'Connor.*

151. The reference we have before us is rather wide; it does not go specifically into the question of a public trustee. I should, therefore, like to ask you whether you would be at all in favour of limiting the liability of trustees in respect of their agents?—The extent to which they would be responsible for the agents whom they employed you mean?

152. Yes, the existing liability of trustees for the employment of agents?—Of course the tendency of recent decisions has been rather to limit that responsibility. There was a case in the House of Lords of Speight *v.* Gaunt which considerably limited their liability, or what was contended to be their liability in that respect.

153. That was a question of the construction of the existing law; but what I mean is would you, by any legislative provision, propose to interfere with the existing law on the subject?—I am not aware that you could safely go much further than the decision in Speight *v.* Gaunt by any interference in that direction.

154. And in respect of liability for the action of co-trustees, I think, in reply to Mr. Warmington, you stated that you would not propose any alteration of the law in that respect?—I should hardly like to say that absolutely without further consideration. You cannot, of course, allow one trustee to leave the matter to his co-trustees, and to shirk all responsibility, that would never do; but whether you might put some limitation on the extent to which he is now liable, where he leaves some matters to his co-trustee, I am not preparad to say.

155. I wanted further to ask you how you would reconcile the proposal to leave the public trustee free from liability where he was associated with a private trustee, with the general proposition that you would not limit the liability of trustees for the acts of their co-trustees?—I do not think that the public trustee could be altogether exempted from liability when he had a co-trustee. I think that it would be only from certain matters that you would exempt him,

Mr. *Arthur O'Connor*—continued.

where, for example, a discretion was allowed, as in the case of advances to children. Then I would permit that to be determined by what I call the family trustee, and I would not place any responsibility in that respect upon the public trustee. But as regards the actual funds, and seeing that the funds were safe, I should not propose to exempt the public trustee in any case from responsibility.

156. Then you would make the public trustee practically only a custodian, as it were, of property?—Yes.

157. Would you make any difference between the *corpus* and the income in that respect?—No, I think I would see that he was responsible for the safety of the *corpus*, and also for the proper distribution of the income.

158. He would be then responsible for the distribution of income by his co-trustee?—I do not think it would do to leave the distribution to the co-trustee.

159. At any rate the field of the operations of the public trustee would cover only a portion of the field of trusts at large?—I think so.

160. He would only deal with a comparatively limited field?—I should have thought that he would deal with by far the greater part of the field. I should think that the simple trusts, which merely involve the protection of capital, and the distribution of it among certain beneficiaries, form by far the larger number of trusts. It is difficult, of course, to judge, but that would be my impression.

161. At present trusteeship is a matter of voluntary obligation?—Entirely.

162. You would not do away with private trustees?—No, I would permit anybody who desired it still to appoint private trustees.

163. And where trustees are now made liable, I suppose in the overwhelming majority of cases it is by reason of their own neglect or default?—It is by reason of their default in point of law, and it may be said to be, in many cases, by reason of their neglect; and yet there is no doubt in my mind that there are many instances in which any reasonable prudent man might and would have acted as they did.

164. But assuming that the system of voluntary trustees is continued, would not the cases of the 77 solicitors whom you enumerated early in your evidence, be still possible; would the establishment of a public trustee prevent a solicitor or any other voluntary trustee from making defaults?—No, I do not think it would; only if you had a public trustee I think that, if a large number of trusts became vested in him, the proportion of defaults would necessarily be considerably less.

165. I suppose that the very persons who are likely to make default are those who would be voluntary trustees who would desire not to be associated with the public trustee?—I do not know. I glanced through the names of those defaulting solicitors and I found that some of them were known to me as clients. I think that they were men who probably, when they became trustees, were intending to act perfectly honestly, and that the dishonesty resulted from some stress, pressure, and temptation that came upon them afterwards. I have no reason to suppose that at the time when they undertook the trust they were people who could not properly have been trusted. I am not speaking of all; I daresay some were; but it so happened that when I looked down the list I found that I had known several of them and was surprised to find their names there.

Sir *Henry Roscoe.*

166. May I ask you whether you consider that any relaxation or otherwise of the existing law should be made with regard to the nature of the legal sources of investment which are now available to trustees, in consequence of any change that may have taken place in the value or nature of the investment?—That is a very difficult question. I was the author of the Trustees Investments Bill which passed into law, which did very largely widen possible trust investments; and I have had communications since suggesting further extensions. But, of course, as matters at present stand, you cannot largely widen the source of investment with a view to a higher income, without widening also, or enlarging also, the sources of risk and danger to the *corpus*.

167. May I ask when that Act of yours became law?—About three years ago.

168. Then the changes which have taken place since that time are not, in your opinion, so considerable as to render it necessary or advisable now to widen still further those sources of investment?—I do not see my way to do it at present. The only direction in which that Bill did not go so far as I at that time contemplated and desired was as regarded investment in colonial securities; and some people may think it was well that the limitation which excluded colonial securities to a considerable extent was maintained.

Colonel *Howard Vincent.*

169. May I take it from the evidence which you have been so good as to give to the Committee that you are strongly of opinion that the appointment of a public trustee is very desirable and necessary?—I have desired to see it for a great many years myself, and I think that it would be a public advantage.

170. And as Lord Halsbury introduced a Bill on the subject, probably we may take it for granted that he shares your view?—I know that he takes the same view as I do on the matter.

171. And the Public Trustees Bill I think has passed the House of Lords on two occasions, after reference to the Standing Committee of the House?—Yes.

172. And you would agree that it is not only necessary on account of the difficulty of obtaining trustees at the present time, but also by reason of the large number of breaches of trust which occur, some of which only are brought to light?—I think so.

173. And it would be your view that what applies to trustees applies also to executors; that is to say, that people of an advanced age have great difficulty in knowing whom to appoint executors of their wills; their friends are their contemporaries, and they do not know people of a younger age whom they can appoint?—Exactly; and of course it not unfrequently happens

Colonel *Howard Vincent*—continued.

happens that those whom they select renounce and decline to perform the duties that have been assigned to them.

174. Therefore, by the appointment of a public trustee the public would have an absolute assurance not only that their trust estates but that their wills would be administered according to their directions by a public functionary?—That is so.

175. And inasmuch as the commission charged would be of the very smallest character it would not in your opinion press severely upon individual estates?—I think not. With regard to the objection of officialism I should like to say that in regard to cases to which that objection applies I think there is considerable force in it. I am not an advocate for officialism. I should like to see a scheme of this kind so framed, as far as possible, as to avoid monopolising in any particular class, or in any particular quarter, the work that is done by professional men whatever may be the nature of their profession; and any provisions which could be inserted with that view would be entirely in accordance with my opinions.

176. Your Lordship is aware that by the Bills introduced into the House of Commons by Mr. Warmington and myself during the last eight or nine years, and also by the Bills introduced into the House of Lords by the late Government, special provision is made that family solicitors should not be superseded?—Yes, I am aware that there are such provisions, and I meant to say that I should like those provisions made as effective as possible.

177. So that there would be no desire upon your part or upon the part of any person interested in this matter to supersede professional men?—Not at all.

178. You would wish rather to assist them?—Certainly.

179. As we all know, rich people have many friends, so that the appointment of a public trustee is of more importance, is it not, for poorer and more friendless persons than for the wealthier classes of the community?—I should think so, except, of course, that what one would call the distinctly poor, are not so often interested in trusts; but those who are not very well to do often are.

180. But we often meet with working men who have saved 100*l.*, and servants and so on, who have saved 100*l.*, and who have the greatest difficulty in knowing whom to appoint as executors of thir wills?—That is perfectly true, and I think that possibly that may have something to do with the very large number of cases in which no wills are made.

181. And what applies to working men as individuals, and to poor people as individuals who have saved a small sum of money, would apply with similar force, would it not, to working men's societies, which have great difficulty in finding trustees?—I daresay it may.

182. May I say that there is no desire, as you said just now, upon the part of any individual to supersede professional men at all, or to compel the public to resort to a public trustee or public executor?—There certainly is not, in my mind.

183. The public would simply have an opportunity of using the public trustee or public executor if they chose to go that expense?—Yes.

Colonel *Howard Vincent*—continued.

184. Is your Lordship aware that in Austria the State takes care of these cases. The Return is: "The care of property belonging to minors, orphans and lunatics, which in England is generally administered by trustees, is in Austria taken into the care of district Courts of Chancery, which delegate the details of their office to guardians and curators, subject to the direct control of tribunals there named"?—I have not studied at all the state of things in foreign countries.

185. Is your Lordship aware that the State of New York provides for the payment of trustees according to a graduated scale; one dollar per cent. for estates of over 10,000 dollars, and so on?—I have not heard that.

186. I do not know whether in the study you have given to the subject your attention has been called to the Public Trustee Act, which has been in force in New Zealand for the last nine or ten years?—No, I have not seen the terms of the Act, although I knew there was one there.

187. Then you were not aware that the income of the public trustee office in New Zealand in the second year of its adoption was 5,000*l.* in excess of the expenditure?—I was not.

188. And that the success of that measure therefore is considerable, notwithstanding the depression which New Zealand has passed through?—I have not heard that

189. Mention has been made this morning of companies which have been established, the Trustees, Executors, and Securities Corporation, and one or two others, purporting in their prospectus to undertake the office of trustee or of executor. Is your Lordship of opinion that it is desirable that speculative companies should be allowed to transact trustee or executor business?—I should not prevent them. If a settlor or a testator chose to appoint them trustees, I think he should be at perfect liberty to do so.

190. But he should do so with his eyes open?—Certainly.

191. In your opinion the accounts of the public trustee office ought to be subject, ought they not, to a careful and independent audit by the Auditor General?—Certainly.

192. And to be made public in the ordinary course?—I would not have any publication of them which would show details of the trusts; I see no necessity for that.

193. But they ought to be subject to a proper audit?—Certainly.

194. Would there be any difficulty whatever in establishing a public trustee office, temporarily, in order to ascertain whether there was a public demand for it, and as to whether it would be successful, and in making provision by law for the transfer of trusts if necessary, if Parliament chose to abolish the office in 10 or 12 years after a good trial?—I should think that that would be possible.

195. Mention has also been made of solicitors, but I do not know whether your Lordship would say that solicitors are more guilty than other trustees of breaches of trust?—I should think not.

Colonel *Howard Vincent*—continued.

196. But trustees as a whole are a body who are subject to great temptations, and for the protection of the public you are of opinion that something more is required?—I think that something more would be expedient.

197. And the statement that there is no public demand for a public trustee would be quite inconsistent with the statement that it would ruin the legal profession if a public trustee office were established?—I do not know about there being any public demand for it, but I have not unfrequently received communications complaining that there is not one, and urging that there should be one.

198. The many breaches of trust would surely constitute a public necessity for it if not a public demand, would they not?—I think there is a sufficient public reason for it.

199. If I may ask one last question: would it, in your opinion, seriously interfere with the professional income of the solicitors as a profession?—That is rather a difficult question to answer; I do not know enough of what the solicitors make. I should require to know how much solicitors made out of trusts before I could answer that question.

200. However, there is no desire upon your part, or upon the part of anybody interested in this subject, to prejudice the honourable profession of solicitors?—No. No doubt there is a very large number of trusts indeed out of which solicitors make nothing; that is quite certain.

201. And it is quite understood that any Bill which your Lordship approved of or introduced would be entirely voluntary, and there would be no compulsion on behalf of any individual?—I should not approve of anything but a voluntary Bill.

202. And it is unlikely that either House of Parliament would approve of it?—I should think so.

*Chairman.*

203. May I ask you one or two more questions. I do not know whether there was any evidence laid before the House of Lords on this subject?—No.

204. Also, in regard to employing a solicitor and surveyor where it is necessary, it would not be desired, as you have already said, to exclude those who have familiarity with family affairs. That might be regulated, I suppose, by rules and directions, that the public trustee should, where it appeared in the interests of the trust, consult a solicitor who was familiar with the work, or should consult any persons who were familiar with the work?—I think it might.

205. Finally, in regard to the question of loss to the State, that would be a financial matter which would depend largely upon the amount of recourse that was had to the public trustee, would it not?—Yes. If there were not much recourse to the public trustee the expense must necessarily be small; and if there was much recourse, a small charge must necessarily furnish the means for that. That is how it strikes me.

Sir *George Osborne Morgan.*

206. Might I take it that you would absolve the trustee, not only if he acted *bonâ fide*, but if he took as much care of the property of his *cestui que* trust as a reasonably prudent man would take of his own property?—I should hardly like to bind myself to an exact statement of the length to which I would go. That is the direction in which I would move; but I know that some friends of mine who are in the habit of dealing in the Courts of Chancery with trusts are rather horrified with my views, and therefore I utter them with some hesitation. I do not go further than saying that I should like to see something done in that direction.

*Friday, 8th March* 1895.

MEMBERS PRESENT :

Mr. Attorney General.
Mr. Butcher.
Dr. Farquharson.
Mr. Kimber.
Sir George Osborne Morgan.
Mr. Arthur O'Connor.
Sir Henry Roscoe.
Colonel Howard Vincent.
Mr. Warmington.

MR. ATTORNEY GENERAL, IN THE CHAIR.

The Right Honourable The Lord HALSBURY (attending by special permission of the House of Peers); Examined.

*Chairman.*

207. WE are anxious to have your Lordship's assistance in reference to the subject-matter of our inquiry, which is relating to the administration of trusts; and I understand that when you were Lord Chancellor you were concerned in the introduction of a Bill which passed through the House of Lords after having been referred to a Committee of the House?—Yes, I think it went twice to the Standing Committee of the House of Lords.

208. Did that Bill meet with the general assent of the House of Lords?—I think it did; but the matter was of a somewhat technical character, and I am afraid I must add that though it met with general approval it was rather because it was recommended by all the lawyers in the House than that they formed any independent judgment upon it.

209. But in point of fact it was recommended by all the lawyers in the House?—Certainly.

210. One point we have been inquiring about is the extent of defalcations on the part of trustees in regard to trust moneys; do you think that there is anything considerable in that direction?—I am afraid very considerable indeed; it is of course difficult to lay down anything in the nature of statistics, but I have got from the gentleman who was Clerk of the Chamber when I was Lord Chancellor, a list of the persons struck off the Rolls during that period, who were persons entitled to be commissioners of oaths; and it was only in that character that they came before me, because I would have no list of those persons who were struck off the rolls by the different courts; but when a person had been commissioner of oaths, and was proved to be guilty of some defalcations in respect of trusts, or indeed other matters, then the point came before me that he was an unfit person to hold that office, and from time to time I had to remove persons: I think the whole number was 77 during the period I held office, and those were not all cases of defalcations of trustees; but at the same time there was a considerable proportion of them; I think 14 out of the 77.

*Chairman*—continued.

Sir *George Osborne Morgan.*

211. You are speaking of solicitors only, of course?—Yes, I am speaking of solicitors only. I said the solicitors who were commissioners for administering oaths.

*Chairman.*

212. The circumstance of their being commissioners for oaths was the fact which enabled you to acquire that information?—It was that which enabled me to have any knowledge of them, and to deal with them.

213. Apart from professional men acting as trustees, of course there is a very large number of private persons who act as trustees?—There is; and certainly, both from my knowledge of the Bar, and since as a judge, I can say that the number of defalcations in trusts is very considerable indeed.

214. Inasmuch as trustees act, and have to act, gratuitously, in the absence of express provision for their remuneration, people are obliged to trust, very often, to whomsoever they can get, are they not?—No doubt. I suppose that one of the commonest cases that arises now with reference to solicitors is where a mortgage is paid off. The only person who can and who does manage that is a solicitor; he receives the money paid off under the mortgage; the trustee is liable for a breach of trust if he leaves that money in his hands; and yet neither the *cestui que* trust and the other trustee, the lay one (if there be one), has any knowledge of what to do with the money, and the solicitor promises to find another investment. If he is a fraudulent solicitor he very often pretends that there is another investment, and pays the interest regularly; and it is not until after his death, perhaps, that it is found out that the whole of the money is gone. That is the

*Chairman*—continued.

the mode in which the thing very commonly arises. Sometimes, of course, it is not the intention of the solicitor who keeps the money to embezzle it at the moment, but some pressure arises and he uses it, and then the usual course follows, of keeping it on and on, and paying the interest as if there was a good investment, and the thing is not discovered until afterwards. Then the co-trustee, if he is a layman and has trusted his co-trustee, is just as responsible as if it was his own act.

215. I suppose that occurrences of that sort through trustees of various kinds misapplying moneys and paying interest on them, and the misconduct being discovered at death, are really matters that are constantly before the court; is not that so?—Undoubtedly.

216. And I suppose that one might say are constantly before the experience of almost every individual?—I should think so; and more before the experience of individuals than before the courts; because what comes before the courts is a very small proportion of what in truth occur.

217. I do not know whether you can tell us whether in bankruptcy proceedings transactions of that sort are frequently cropping up in the courts?—I am afraid I cannot say; I have no experience of that. I should think that inasmuch as they do occur very constantly, and that bankruptcies occur, the two things must concur sometimes; but I have no experience of that. I think I ought to add that one reason of the difficulty which there is in obtaining persons to act as trustees arises from the extremely severe law that has been applied to trustees. The truth is that you have frightened every responsible and respectable man out of being a trustee, as a rule; there is nobody will accept the office of trustee unless he is influenced by a very chivalrous spirit.

218. Upon that point some questions were asked of the Lord Chancellor, who has been good enough to give evidence before us, and I should like to ask your Lordship whether you think it would be advisable, or would be safe, to relax the law in regard to trustees, with the object of removing that unwillingness on the part of persons to accept that duty?—I do indeed. I think that in modern times it has become absolutely essential, or you will get no persons to act as trustees. It is judge-made law, as I need not tell you, Mr. Attorney. I think that one learned judge, Sir Robert Henley, afterwards Lord Northington, said that he did not think that a trustee could be reasonably expected to take as much care of trust property as of his own; but that has not been the spirit in which the Courts of Equity have administered the law of trustees.

219. Would it be sufficient, do you think, to excuse by law a trustee from liability, if he took all reasonable care?—I should think so.

220. And to treat him as any other bailee?—I should think so. I cannot help thinking that what is at the root of the spirit in which the law has been administered is that the courts have said, "Well, if you want to ask us, ask us and we will tell you what to do; but if you choose to act upon your own authority we will make you insure us, you must do it at your own risk." The objection to that is that that all means expense.

Sir *George Osborne Morgan.*

221. They can do that under the Trustee Act?—Yes; and in the Trustees' Relief Act we have to some extent protected a trustee. If he commits a breach of trust by a request in writing of his *cestui que* trust, he is now protected, except from those that come after, only in the case of a tenant for life; and even as to that, I forget whether the provision passed into law in any Act; but there was certainly a provision which enabled a *cestui que* trust to establish a fund for recouping a trustee in the event of his having been made liable in respect of those who came after him in remainder.

222. I understood that the Statute of Limitations was made to apply to trustees?—No; I do not think that we made the Statute of Limitations apply to trustees. I am speaking from an unrefreshed memory: but I think not. I will not say that it was not done, but it certainly was not part of my original design; at the same time, the Bill was amended several times in Committee, and I may be wrong.

223. The Lord Chancellor, I think, told us so?—It may be so.

*Chairman.*

224. One question has been before our minds a good deal, especially in consideration of the different bills which have been introduced, including the one which your Lordship was concerned in, and that is, the establishment of some public trustee, some public functionary. We should be glad to hear what your opinion is on that point?—I was very strongly in favour of, and, indeed, one of my bills was for the purpose of establishing a public trustee. I may say at once that I was partly induced to take that view because there were being established a number of companies for the purpose of administering trusts and executorships, which I thought very dangerous, and still think very dangerous; and, after I got the invitation which the Committee sent me to come here, I made some inquiries, and found that a good many of those companies have not succeeded—I am afraid with disastrous effect upon those who have taken part in them. I thought—and, as I say, still think—that those companies are very dangerous indeed. You never can be certain that they have enough capital to deal with trust money.

225. They are, I suppose, limited liability companies?—Just so.

226. And is it the fact (I rather think it is) that a limited liability company cannot be themselves a trustee or hold property, especially land, in their own name, but that they have to put it in the name of an official of their company?—Yes; but that, of course, would be only machinery. The danger, it seemed to me (and I think so still), is that all those companies that take other people's money only take it to speculate with it, and it is not a desirable thing to allow a company to speculate with trust money, I think. My idea in taking the view that I did about the public trustee was that you had there a certain depository of capital. I know that some of the members who took a different view from myself thought that the public trustee should not be allowed to act with anybody else, but should be absolutely, by himself as it were, a public depository. I took a different

*Chairman*—continued.

different view. I thought that it would be quite possible to allow a public trustee to act together with a private trustee, and to allow the private trustee to administer the estate from time to time, but that in order to take care that the capital was safe you might have the public trustee joined with him—in which case you would be perfectly certain that the capital would be all right. The *cestui que* trusts themselves take care of the interest. That is not where the difficulty arises. If the interest is not paid they are immediately alive to the fact that they have not received their whole income. The difficulty always arises about the capital; and then, of course, the question would arise about the trust being accepted where there was no necessity for the management of property, and so on; and it appeared to me that there might be quite a reasonable system established by which there should be a public trustee, who, in truth, would be the depository of the capital, and that he should have a private trustee associated with him, who might be able to administer the ordinary business of the estate—the public trustee himself exercising even sometimes a certain amount of management.

227. You mentioned, as one reason for your wishing to see a public trustee established, the existence of certain companies who undertake to act as trustees and the disastrous results which have accrued in some cases. Could you tell us where we should be able to get the best information in regard to those companies, and what is being done in regard to them?—I really cannot tell you. There is, of course, a register of limited liability companies, and one might learn from that what had happened to some of them. I have been told (but not in any way that I could treat as positive information) that a great many of them have gone wrong.

228. You think that we might go to Somerset House and get that information from the Registrar's Office?—I should think there would be no difficulty in that.

229. As I understand your view would be that in general the public trustee should act primarily as a depository?—Yes, I think so.

230. But with power, of course, of management, in case he was left sole trustee?—Yes.

231. You would not exclude that?—No, I would not; but that was provided for in my Bill, by giving the public trustee absolute discretion as to what he would accept and what he would refuse. If the business which he was called upon to carry on was inconsistent with his public duties, he would refuse it, of course; and I gave him an absolute discretion of refusal.

232. Did you contemplate having a central trustee in London?—I rather think the provision was intended to be central in this sense: that there was one head office, but that you might have other offices established all over the country as the necessity arose.

233. So as to enable a system of gradual extension all over the country as rapid as was necessary?—As the necessity appeared to demand.

234. What do you think in reference to the relations of this trustee to the court. Of course, he would have the same power of consulting the judge and taking the opinion of the judge as trustees now have; but would you enable him



*Chairman*—continued.

to have access to the judge, of course, subject to the discretion of the judge, to get directions at any time?—I think so; but I should say that my Bill was introduced in 1890, and I had intended to introduce another afterwards, and, in thinking over it, I came to the conclusion that the best way of doing it would be to make the public trustee an officer of the High Court of Justice.

235. So that the judge might give him directions?—Certainly.

236. And so that the whole control should be in the hands of the judiciary?—Yes, I came to that conclusion at last. At one time I had thought of the Treasury, which is always a convenient impersonal creature that you can apply any machinery to, to look after the finance of it; but, upon consideration, I came afterwards to the conclusion that it would have been better to have put it as one branch of the High Court of Justice.

237. So far as regards the exercise of a discretion in accepting particular trusts—for example, the carrying on of a business—would you think that there ought to be some control of an administrative character, having regard to the financial liability of the Treasury?—I little doubt that, unless you mean a judicial discretion. I think that a judicial discretion might very well be exercised; but I should very much doubt whether the mere financing by the Treasury ought to give them any control over the administration of trusts.

238. I did not mean giving them any control over the administration of trusts, but only a discretion in regard to accepting or rejecting particular trust estates?—I should doubt that. The public trustee, I take it, would be indemnified against anything except his wilful default. I should assume that to be part of the amendmen of the law that I should desire to see passed you established a public trustee; therefore except for some such judicial discretion as you have glanced at, I do not see any necessity for controlling him.

239. He would, as I gather, in your view, be entirely subject to judicial control, and, being treated as an officer of the court, the supervision would be wholly with the judicial authority?—I think so. That, I confess, is the view to which I have ultimately come. It was not my original view. My original view was (for the sake of convenience, I admit) to leave it to the Treasury, but I have since come to think that that would not be desirable.

240. In regard to the remuneration—that is to say, not the remuneration of the official trustee, but in regard to the charge that would be made with respect to the administration of particular trusts—that, I presume, you would leave to be settled by the Treasury?—Yes, I think so; at the same time, I think that the Legislature itself ought to provide that a profit ought not to be made out of it. I am suspicious of leaving any of these things where it is possible to make a profit out of them. I think it is right that the office should be self-supporting, but I think it is very desirable if, for instance, any Chancellor of the Exchequer should not be allowed to put an additional stamp upon administration, on the taking out of dividends, or this, that, and the other, so as to make it a source of

*Chairman*—continued.

revenue. That I think would be unjust. It is quite right that it should be self-supporting, but it would be by no means right that it should be a source of revenue.

241. That, I suppose, could be adjusted by Treasury Minutes from time to time, so that the amount in regard to each estate should practically be sufficient to bear the cost?—I think that is a matter which could be easily calculated beforehand; and, I confess, I prefer a statute to a Treasury Minute.

242. It might be done by a statute?—Yes.

243. I want now to ask you one other question. We have heard something with regard to the interests of professional men being disturbed, and their business displaced, by reason of the creation of a public trustee; has that subject presented itself to your mind?—Oh, dear, yes, and very pointedly indeed. I assure you that it was pressed upon my attention very much during the progress of my Bill. I was informed, and I had reason to believe that it was quite accurate, that the whole body of solicitors would be against me, because it was calculated to deprive them of their natural gains and profits. But I endeavoured to parry that by a provision for the public trustee being permitted to have associated with him another trustee.

244. Of course, it would often happen in cases of trusts that the public trustee would not be acquainted with the family property or the way in which things were done, or as to the wishes of the family, which should be consulted?—No doubt.

245. And I suppose that it would be legitimate to authorise the public trustee, and indeed to recommend him, when it was necessary, to employ professional men, to employ those who would be familiar with the family affairs?—No doubt; and that was one of the very things which I contemplated assuming that executorships were to be permitted. For instance, in all those different inquiries where a question arose, involving considerable expense; a public trustee would be obliged to have certificates of death, proof of the identity of parties and so forth, in order to do his duty; whereas the private trustee associated with him would know all the family and would be satisfied with much less evidence at all events, and with no expense to the parties.

246. Apart from the relief that the employment of a public trustee would be to the *cestui que* trusts who sometimes find their estates plundered or lost, it would be a sensible relief, would it not, to the private trustee himself, to feel that he was not exposed to risk, but that the property would all be in safe hands, and not liable to be lost?—It would indeed. The very first thing that happens to a trustee is to have an application by the *cestui que* trust to change the investments. The *cestui que* trust wants eight per cent. instead of three per cent., and the trustee's life is a burden to him if he does not yield to that solicitation; whereas if he does he probably commits a breach of trust and hears of it afterwards, or his children do.

Sir *George Osborne Morgan.*

247. That is especially the case, I suppose, now that the interest upon authorised securities has gone down so much?—No doubt.

*Chairman.*

248. And a private trustee would also feel secure from depredations by his co-trustees if they were so minded, would he not?—Yes, I think that is a very important element indeed; he could trust his public co-trustee and be secure, but he cannot now trust his private co-trustee. If he does he is responsible because each trustee must act, as I need not say to you, Mr. Attorney; he cannot leave it to his co-trustee, or he is responsible if he does.

249. There is one matter which has arisen in the course of our investigation, and that is, the character of the investments. Supposing that investments of a precarious character were authorised by the terms of the trust, I suppose that there need not be any rule that the public trustee should insist upon a safer investment?—No, I take it that even harsh as the law is at present, if the trust authorises a particular investment, the trust authorises it, and the trustee is not responsible.

250. It was rather in this view that I put the question: That if the public trustee were appointed it might be supposed that there was a Government guarantee that nothing should be lost—that whatever was in the hands of the trustee would be equivalent to consols. I suppose that would not be contemplated?—I do not think so, nor do I see the necessity for it, because if the trust authorises it the public trustee would not be responsible, and the Government guarantee would not arise.

251. Any more than in the case of a private trustee?—No more than in the case of a private trustee.

252. I have only one other question to ask you. You contemplate, of course, that this should be purely permissive and optional?—Certainly.

Mr. *Warmington.*

253. I think your Lordship introduced the Bill of 1890 in the House of Lords?—Yes.

254. Would it be impertinent to ask what considerations moved you to introduce that Bill into the House; was it simply upon your own personal knowledge or upon representations which had been made to you?—So far as I can carry my mind back the occasion, I do not know that I have thought of it since, I think it arose in this way: There were one or two bills, which I opposed the the House of Lords, for the purpose of giving powers to companies to act as trustees; I took a very strong view against the expediency of so doing, and was met by a good many of the arguments that I have now put before the Committee, that is to say, by the hardship on the trustees and the difficulty of getting good and respectable trustees; and I think that that was what moved me to do it.

255. Then there was associated with you, and may we take it of the same opinion, every lord who was practically acquainted with the administration of the law?—I think so. I will not say associated with me; but I do not remember that there was any single objection raised by any legal member of the House, and undoubtedly the present

Mr. *Warmington*—continued.

present Lord Chancellor took my view. I think he went a good deal further than I did; in respect of permission to the companies I think he rather took a different view from myself, and thought that it might be permitted; but I did not.

256. Then, in the following year, a Bill was introduced by the Government in the House of Commons; I see it is backed by the Chancellor of the Exchequer (Mr. Goschen), Mr. Jackson and the Attorney General, who was then Sir Richard Webster?—Yes.

257. And that was then a Government measure?—Yes, it was.

258. Had any further information been obtained in 1891 beyond that which had been in your possession in 1890?—Information I doubt. There had been a great many conferences between myself and the Chancellor of the Exchequer (Mr. Goschen) at the time, and I rather think—but, as I say, I am speaking again from an unrefreshed memory—but I rather think that that Bill was one which I only yielded to upon pressure, because I think you will find that in it the Treasury took a more prominent part than I had proposed in my Bill.

259. Now, if the law as to the liability of trustees were relaxed in favour of the trustee, would that, in your opinion, make the desirability of having a public trustee more or less?—I should say it would be more. I think that a relaxation of the law by itself, unaccompanied by some such measure, would be undesirable, because, of course, anything that would relieve the trustees that at present exist of their responsibility is calculated, I think, to stimulate defalcations.

260. It would be putting the same thing in another way, would it not, to say that if there were appointed a public trustee there would be less harm in relaxing the law as to liability?—Just so.

261. In your experience, the breaches of trust arise, of course, in the first instance, from dishonesty, it may be of the trustee or of the person for whom the trustee is liable?—Yes.

262. Then, again, from carelessness?—Very often.

263. And then, again, from yielding to the importunity of the person beneficially interested?—I think that is the commonest cause.

264. Do those three causes together, in your opinion, conduce to a very considerable loss of trust funds in the year?—I have no doubt of it at all.

265. And is that loss lessened or increased by the difficulty of finding men of position and means to accept the office of trustee?—Certainly it is increased.

266. And there would be no objection, in your opinion, for the purpose of meeting the want of personal knowledge of the circumstances of the trust and of the position of the beneficiaries, to associating private persons with the public trustee?—I think not the least objection.

267. I think probably the provision to which you referred, enabling the public trustee to appoint a solicitor and employ a solicitor, is in Section 12 of the Bill we had before us in 1891; have you seen it?—I have not seen it lately, but I remember that there was such a provision (*after looking at the Bill*). Yes, Sub-section 2, you mean particularly, I suppose?

268. Yes?—Yes, certainly.

269. The great advantage of the public trustee would be, I suppose, the absolute security of the capital fund?—Yes.

270. By that you do not mean, I take it, that the trust would be absolutely secure in the sense that the trust funds might not be depreciated in the ordinary depreciation of the market?—No, but say from wilful defalcations.

271. Probably it has come before you as a judge, especially in the Privy Council, that there is in some of the colonies a public trustee already?—Yes.

272. Has that been found to work well or ill?—So far as I have heard; but I must say that my knowledge of it is very imperfect; it was supposed to have worked well.

273. Have you ever heard of any complaints of that?—No.

274. Nor in regard to India, have you had any complaints?—No.

Dr. *Farquharson.*

275. Do you consider that the difficulties and dangers in connection with private trusteeship are more likely to increase or diminish in future?—I think there are circumstances which exist now which render it very likely that the dangers and difficulties will increase. So many of the investments now are payable to bearer that the facility of getting rid of them and misappropriating them is consequently very much greater.

276. So that the difficulty of private persons obtaining trustees to act for them would be very great in the future, probably?—Yes, I think so.

277. And that makes a strong argument, does it not, for the appointment of a public trustee?—Yes; of course, when you have stock or anything of that sort you can get a stop order, and there are various devices to secure it; but when you have securities payable to bearer, and which really pass from hand to hand like so many sovereigns, and which presumably are in the custody of the trustee himself, that undoubtedly does lead to greater facilities for defalcations; and I am afraid that the result will be very bad in the future.

278. Do you consider that there would be any public advantage as well as private advantage in the appointment of a public trustee?—I think only so far as this: that if you have a system of trusts at all it is a great scandal that from time to time you see a firm broken up and find that there has been an extensive amount of defalcation in respect of the administration of trusts. If trusts are to exist at all, and capital to be secured, provision ought to be made in some way or another that that scandal should not continually recur as it does from time to time. I daresay the honourable Member will remember how some seven or eight years ago a great firm, in the highest credit, was actually dispersed, and it was found that enormous defalcations had taken place in a great number of trusts.

279. As I understand, the public trustee is not

Dr. *Farquharson*—continued.

not to be held personally responsible in any way?—In one sense he is. If the public trustee did anything which would, in the then state of the law such as I contemplated, make him guilty of a breach of trust, the Consolidated Fund would have to pay.

280. The Consolidated Fund is behind the public trustee, then, for the protection of those who take advantage of him?—Yes; but that would, as I suggest, be only in the amended state of the law, where he would only be liable under circumstances where he ought not to be so liable.

281. Where a private trustee is associated with a public trustee, I presume you would relieve the public trustee from all responsibility?—From all responsibility for the capital, but not from responsibility for the thing he was entrusted to manage. He personally might be responsible. Take the ordinary case, that he might be allowed to give the dividend to his *cestui que* trust. If he made away with the dividends he would be responsible, or if he carelessly lost them he would be responsible.

282. Do you think that the expense of the office of public trustee would be in any degree onerous to small trusts?—That would be, of course, a matter of arrangement. I should have thought not. If the state of the law was such as I suggest, I should have thought that it would not be necessary to have such a very precise and accurate system as is necessary when you are dealing with a public office; but that when he had a private trustee associated with him he might content himself with the ordinary evidence that a man of business would content himself with.

283. But might there not be delay in the administration of trusts from the public trustee's office being closed up with business?—In the view that I take of the public trustee and his functions, you cannot change investments of any considerable extent without considerable delay; as it is, you must get your mortgage, you must get your title examined, and do a great many things which involve delay at present. If the money was in the Funds, of course you could do it next day.

284. I mean in starting new trusts?—Do you mean in investing?

285. Yes?—Of course there must be some delay.

Sir *Henry Roscoe.*

286. I understand you to say that companies ought not to be allowed to speculate with trust funds?—Yes.

287. Did I correctly understand you to say that the companies, at the present moment, are able or do practically invest in securities other than those which are available for private trusts?—I am not able to say whether they do; but in the Bills that I took such an objection to they had the power to do so. I cannot answer for what they have actually done, but they had the power to do so, which is what made me oppose them so strenuously as I did.

288. That was, in your view, a very objectionable course?—Very objectionable indeed.

Sir *Henry Roscoe*—continued.

289. Supposing, in the case of a trust, there are both public and private trustees, and a question arises such as was mentioned by one of the honourable Members, that the private trustees desire to invest in securities that the public trustee does not think proper; would he have power to restrict the investment?—I think he would take the opinion of the court.

290. I presume that if this arrangement were made the business would be very considerable in the course of time?—I should think it would. It is difficult to say how much property there is in trust in this country, but I believe all calculations make it very considerable indeed.

291. Would you think that it would be necessary to have, in addition to the central authority in London, any provisional authorities capable of taking up the work in the provinces?—I am a little jealous of suggesting that it should be so perfectly widespread. You might have centres, as you have High Court registrars, for instance, in various parts of England; but I should be very sorry to suppose that there must be a public trustee in every town. Still it might be spread to certain centres.

292. It has been stated over and over again, as you no doubt are aware, that the difficulty of finding trustees is much exaggerated?—Certainly.

293. But you do not think that that is so; you think that there is very considerable difficulty in finding adequate and responsible trustees?—I am sure there is. I think that everybody who has had to apply to a person to become trustee will know that it is only undertaken with great hesitation now.

294. And it has also been stated that the cases of misappropriation are very small indeed, infinitesimal as compared with the vast amount of property which is faithfully administered. You do not altogether agree with that, I understand?—I should think not; but of course when you are making a comparison, of that sort of proportion, you must first have accurate statistics of what is the amount, and then accurate statistics of what is misappropriated; it is so vague that I cannot say that. All I can say is that I see evidence of very considerable misappropriation; but the proportion depends, of course, upon what amount is in trust; and that, as I have already said, I have no means of knowing. A great many people say that it is very large, and I believe it is, but there are no accurate statistics.

295. In your opinion the amount is sufficiently large to make it desirable that there should be a change?—I think so.

Sir *George Osborne Morgan.*

296. I think one of the arguments brought forward against this proposed change of the law is, that it would lead to a great increase of officialism?—I think that is so, and I do not deny that there is some danger of that.

297. I understand that you would make it a purely permissive matter to apply for a public trustee?—Yes, certainly.

298. I am

Sir *George Osborne Morgan*—continued.

298. I am afraid the experience of the Land Transfer Act, which you know was permissive, is not very favourable, is it, as regards the number of applications which would be made?—One gets on delicate ground there. I am afraid, speaking with all respect to the other branch of the profession, that it is an unpopular institution. When people are dealing with land and the registration of land, they are necessarily in the hands of solicitors, and the solicitors do not like the Land Transfer Act.

299. You do not think, then, that the same influences would be brought to bear (to put it delicately), to prevent *cestui que* trusts from applying to have a public trustee appointed?—I think not. I do not think that the same difficulty would arise; and my whole theory of allowing a private trustee to act with the public trustee I thought would in a great measure get rid of the opposition that I anticipated; and, I think, that I did to some extent parry the opposition.

300. With regard to the difficulty of finding trustees, I do not know whether you are aware that Lord Romilly at one time absolutely refused to appoint either a relation or a solicitor as a trustee, because he said that all breaches of trust were committed by one or other of those parties?—I was not aware of that, but I can quite understand that it would be so. On the other hand, there was one learned judge, I think, who said that the use of a trustee was to commit judicious breaches of trust.

301. I believe Lord Romilly was obliged to modify his rule, because it was found that no one else would undertake trusts; it has been suggested, I believe, that the difficulty of finding a trustee would become less if trustees were allowed a small payment, or if remuneration was given to them for the trouble they undertook; what is your view with regard to that?—I cannot concur with that. The objection is not upon the ground of its being gratuitous; the objection is always on the ground of the serious risk incurred, and the inevitable trouble involved in constant conflict with the *cestui que* trusts.

302. I understood you to say that that trouble was greatly increased now that the authorised investments yield such small dividends?—Certainly. Of course, the *cestui que* trusts feel distinctly that their interest is very small, and they have a great variety of very flattering prospectuses sent to them from time to time, perfectly secure, as is alleged, and I am afraid the people believe that more than they should.

303. And they feel very much aggrieved with their trustees if they will not give way?—Very angry indeed; they are under the impression that their trustees are their natural enemies.

304. You were speaking of securities payable to bearer; I believe that now a great many colonial securities are payable to bearer, are they not?—Yes.

305. And nearly all foreign securities?—Yes, most of them.

306. With regard to the relation between the public trustee and the court, I suppose you would allow a public trustee to apply by summons in chambers?—Yes, certainly.

307. In the least expensive way possible?—Yes, in the least expensive way possible. And I think it would be very well indeed to get rid of the vagueness, that is sometimes applicable to those questions, of how much is to be paid; and that is why I said just now to the Attorney General, that I should prefer a statutable rate being enacted, so that there should be no doubt about it. It might be proportionate to the sum involved, whether dividend or what not, and it ought to be very small where the trust was very small.

308. Would you set apart one particular judge to deal with these questions?—I think not.

309. Of course the expense of administration has been greatly decreased of late years?—It has; but still it is very considerable, I am sorry to say. I think there is room for improvement there.

310. I daresay you, like myself, can remember the time when the expense of chancery suits was, in the case of small properties, perfectly prohibitory?—Yes; it was said that you never would send a fellow creature into chancery.

311. You are aware that the county courts now have jurisdiction up to 500*l.*?—Yes.

312. Would you extend that jurisdiction?—No, I think not.

Mr. *Kimber.*

313. Unfortunately, the case for an official trustee appears very much to be launched upon an impalement of the body of solicitors as the principal delinquents?—No, I do not think so; you will forgive me for saying that my observations on that subject had reference to those with whom I had come in contact in my official capacity; that is the reason for them, not because I had any particular notion of impaling the solicitors, but because I had actual statistics about them which I had not about others.

314. I am quite satisfied; but at the same time, as I find myself the only representative of that side of the profession here, it will not, I hope, be considered out of place if I ask you one or two questions dealing with that a little closer. Your Lordship has said that as regards the proportion of solicitors among defaulting trustees it would be difficult to speak without statistics?—Yes.

315. I am in a position now, which I was not on the last occasion, to put a figure or two before the Committee. Would you be prepared to believe, on my statement, or rather upon that of the Secretary of the Incorporated Law Society, which I have before me, that since 1889 the whole number of defaulting trustee solicitors was nine, that the whole number of solicitors brought before the Statutory Committee as defaulting trustees was nine since the year 1889, and that seven have been solicitors for defaulting trustees, 16 in all, and I think your Lordship said 14?—I think I have statistics in my pocket which rather contradict those statistics; the number superseded by me, I find, was 77.

316. But not for defaulting?—Of these 14 had committed breaches of trust, and the remainder had misappropriated money of their clients; 62 were struck off the Rolls, and 15 suspended for periods varying from six months to five years; 31 were London cases, and 46 were country cases; this is a list that has been pre-

Mr. *Kimber*—continued.

pared for me by Mr. Preston, who was my officer when I was in office.

317. That is just what we want to get at. During what period of time was that?—I think from 1885 to 1894, that is from 1885 up to the present time.

318. That is 10 years?—Yes.

319. The number being 77 in all?—Yes, 77 in all; but, as I explained, those are only persons who came before me who happened to be commissioners for administering oaths. I suppose there was no particular reason why such persons should be peculiarly open to the observation; it only happens that because they were commissioners for administering oaths they came before me.

320. The body of solicitors, you are aware, number 15,500?—But I hope the honourable Member will not suppose that I am making any attack upon the body of solicitors. I believe that the number of cases in proportion to the number of solicitors is very small indeed; but this observation is manifest; that when you are dealing with what I gave as the commonest case of breach of trust, namely, the payment off of a mortgage and so on, that is a thing that necessarily goes through the hands of a solicitor; a layman does not deal in such matters; therefore it is not because he is a solicitor, but because he is the only person that can deal with such a matter, that you find more commonly breaches of trust in that respect than you do with other men.

321. He belongs to the class that have the most opportunities?—Yes; that is all.

322. Is it not all the more to the credit of that body, then, that there should be so few cases?—I think so; I should be the last person to impute anything to solicitors as a body. I have the highest respect for them and the greatest reason to say so.

323. Then I would ask you whether the discipline over solicitors in their conduct either as professional men or as trustees is not more prompt and more severe than as regards any other class of the community?—Certainly I should agree, quite.

324. As regards discipline and amenability to the judgments of the court, it is the function of the Incorporated Law Society, and their duty, to investigate all those cases and bring them immediately before the court?—No doubt.

325. And the means which Her Majesty's subjects, even the humblest, have of invoking that action is the simplest and least expensive kind of any remedy given to any class of subject in the kingdom?—I think you are quite right; I think it is so.

326. A simple letter from anybody to the Incorporated Law Society sets them in motion?—Certainly.

327. You will have had considerable experience of the way in which the council of that body performs that duty; would you be prepared to say that they exercise that duty in a very proper way?—Most admirably.

328. You have, of course, never heard of a case of alleged malpractice being brought before them requiring to be brought before the court, which they have not brought before the court?—No, I do not think I ever have.

Mr. *Kimber*—continued.

329. And the consequences of this discipline and of any punishment is most serious; it is practically not only professional ruin but social ruin?—It is, of course; one may say that it deprives a man of the profession to which he has been trained by a long and expensive course, and it deprives him of his means of livelihood.

330. And, generally, one may say that by means of this process a solicitor who is a trustee can be more speedily brought to justice if he is a defaulter than any trustee who is not a solicitor?—Yes, I think so.

331. That being so, would not you say that that position of things would tend to deter solicitor trustees more than others from defalcations?—Yes. I think one must make this observation; that nobody when committing breaches of trust or any other offence calculates upon being found out.

332. That is an observation which you may make as regards any class of offenders?—No doubt.

333. Now, as regards the duties of a trustee, I think your Lordship said that you would make the official trustees' duty principally that of a depository of trust funds?—Yes.

334. Do I rightly understand by that that the discretionary and administrative functions which a trustee has to perform would not be placed in his hands?—I do not say that. What I pointed out as the advantage of the system that I was advocating was, that you might have the public trustee as the mere depository, and, associated with him, another; but I did not mean that you should confine the public trustee to that, if he and the persons interested in the trust thought proper to entrust him with other functions.

335. It is the fact, I believe we may say generally, that the large part of the business of the administration of trusts consists in the exercise of powers and discretions of a more or less delicate character and of a delicate personal nature?—I am not quite certain that I follow what the honourable member means by "delicate."

336. I will just enumerate a few. There are, under many wills, for instance, power to make settlements on children as they come of age?—Certainly.

337. Power of giving consents to marriages?—Yes.

338. Power of advancement of capital for the starting in the world of younger children?—Yes.

339. Power of making allowances for maintenance during the period of education?—Yes.

340. Or of carrying on a business, such as that of farming, or a mercantile business such as a tobacco merchant, or even a shipowner?—Yes, all those things are the subjects of trusts, no doubt.

341. And the granting of leases, and the determination of the rents to be acquired; the classes of buildings to be erected; and the sale and exchange of real property?—Yes.

342. All those and many other things require the exercise of personal discretion?—Certainly.

343. And of a knowledge of the circumstances of the family?—Yes.

344. Do you propose that the official trustee should exercise all those discretions?—That would

Mr. *Kimber*—continued.

would depend upon his own option. My Bill certainly gave the public trustee an absolute discretion as to whether he would, or would not, accept a trust. I should imagine that a public trustee would very often refuse to accept a trust, involving such considerations as you are putting forward, unless he had associated with him some one who was more familiar with the matter than himself.

345. Do you consider the Incorporated Law Society as representing the solicitors is probably the most competent body of any bodies to judge whether there is, or is not a difficulty in procuring private trustees?—I really cannot say. Solictors are not very often the persons first applied to. A young gentleman and a young lady who are going to be married ask A. B. and C. D. whether they will be trustees, or their father or mother does; and I should doubt whether the solicitors were applied to in such a matter. When the trustees have been selected the solicitors are called upon to draw settlements or to look after the settlements; but I doubt very much whether in the first instance they are consulted as to who are going to be trustees, or whether there is a difficulty in getting them.

346. I am afraid that my experience of 40 years is rather the other way; I find that they are almost invariably consulted?—I can only answer from my own experience. I have been very often applied to to become a trustee, and never once by a solicitor, but very often by the parties.

347. Are you aware that the Council of the Incorporated Law Society have stated that the difficulty of finding fit persons who are willing to act as trustees has been exaggerated?—I have a difficulty in answering that question. I have not heard that before, that question I can answer; I have not heard it. But in the first place I do not know where it has been exaggerated, or what the exaggeration is, and what is, or what is the qualification that is supposed to be put upon that exaggeration.

348. Would you consider them competent to form an opinion upon that subject?—I have already given my answer. I do not know that they are more qualified than anybody else. I think that persons who move about in the world hear a good deal of these things, quite apart from what happens in solicitors' chambers.

349. Then, as regards investments by a trustee, would you allow the official trustee to hold shares with the liability upon them, say, in banks or insurance offices?—I can hardly give an absolute opinion upon such a subject; it would depend very much upon what the shares were. In giving a trustee an absolute power of refusing to take trust property at all, I am supposed to have dealt with all that matter. A public trustee must be properly advised, or, if he is not sufficiently advised, with power to apply to the Court he ought to be left with a free hand.

350. Assuming that he is permitted to hold such shares and liability were to ensue, would you propose that he should be responsible, the same as any other shareholder?—Not if the trust which he was administering permitted it. Its failure would be one of the incidents of the property in question.

Mr. *Kimber*—continued.

351. I do not know whether I have made myself clear; supposing we will say that in the City of Glasgow Bank, which failed, the trustees held many of its shares?—You mean with liabilities upon their shares?

352. Yes; supposing a public trustee had held some of those shares, for instance?—I should think a trustee would naturally refuse to hold shares of that character.

353. Would you permit him to hold them, supposing he chose to do so, because at the time the trustees held those shares they were considered as good as bank stock?—I cannot answer an abstract question of that sort. The discretion with which one would invest a public trustee would be so wide in my view that if he did take them, and without any default of his own the thing failed, and there was a liability upon them, the public trustee would then be indemnified by the public guarantee of the Consolidated Fund. But in saying that I should think that just for the very consideration which the honourable Member suggests a public trustee would be very slow to accept such shares.

354. Now, your Lordship expressed the opinion that the tendency might be, in future, rather to an increase of cases of defalcation, for the reason, amongst others, that a large number of values are put in the shape of payment to bearer?—Yes.

355. Is your Lordship aware that the practice now with trustees, in the case of trusts in which securities of that kind are held, the practice amongst solicitors at all events, is to advise that they should be lodged at one of the best banks in the name of the trustees, and only withdrawable by their joint signature, so that the practical effect of that is that the safe custody of the article itself is secured; and also it is just as much protected from defalcation as if it were a registered stock?—I was not aware that that was the practice, but I have no doubt that that would be a very prudent course to pursue.

Sir *George Osborne Morgan.*

356. I suppose if a trustee wants to commit a breach of trust he takes care not to adopt that prudent course?—No doubt.

Mr. *Kimber.*

357. In the case of an official trustee, where do you propose such securities should be kept; under his sole signature and power?—Certainly.

358. Then, with the infirmities of human nature, there would be the same liability to depredation as in the case of a private trustee?—That the honourable Member must judge of himself. I do not think so.

359. Then that brings me to a covering point; that is, that I suppose you would take security from this gentleman?—No, indeed I would not. If he has the security of the Consolidated Fund I do not know that I should require any other security.

360. I mean security from him for his fidelity to the State as his employers?—I do not know, I should hesitate indeed.

Mr. *Kimber*—continued.

361. I believe it is the practice in the Receiver General's Department to take security from the civil servants?—If it is the practice, I suppose it would be observed in his case; but I was not aware of that; nor, dealing with a great officer of State, such as a public trustee would be, should I have thought it was at all necessary; but I can hardly form a judgment on that subject.

362. You have, perhaps, not considered it?—No.

363. As the author of one of these Bills, did your Lordship go so far as to consider what would be the salary that you would give to such an officer, and what staff he ought to have?—No, I did not. At that time, as I think I mentioned, my impression was to make it a department of the Treasury. I have already explained that I came to the conclusion afterwards that that would be undesirable, and that I would rather make it a branch of the High Court of Justice; but leaving to the Treasury, as I intended to do at that time, that part of it, I left entirely to the Treasury officials what the conditions should be.

364. And your Lordship, perhaps, did not consider either what charge to the public should be made?—No; subject to this: that I was of opinion, and expressed that opinion, that it should be self-supporting and only self-supporting, the line being that there should be no profit made out of it, but that it should be self-supporting.

365. In the first instance there would necessarily be a loss, would there not, until it got sufficient business?—Yes.

Mr. *Arthur O'Connor.*

366. I believe that trust cases are assigned to the Chancery Division?—Yes, but they arise in various forms.

367. Would it be possible to obtain from the records of the Chancery Division information with regard to the number of cases of breach of trust?—I should think not without very minute search through all the Chancery records; I should doubt it. Where a case was reported, of course it could be easily found in the Law Reports; but there are a good many cases which are not reported.

368. There is a very considerable amount of property in court now, is there not, which is under trust or has been under trust?—Yes.

369. Would it be possible to obtain a separate account of those trusts funds?—Certainly.

370. I do not know whether your Lordship has read the evidence which has been already given by the Lord Chancellor?—No, I have not; indeed, I have not seen it.

371. Would you be in favour of limiting in any respect the liability of a trustee for his co-trustee as it at present stands?—Yes, I think I would; but, as I have said, I look at the appointment of a public trustee as part of the amendment. I should hesitate to relax the law of trustees as it is at present, unless you provided some means of greater security for the *cestui que* trusts.

372. I suppose that the association of a private trustee with the official trustee would in a great many matters, and on many occasions, involve delay and routine, and what might possibly be regarded as red-tapeism?—I do not deny that there may be some danger of that; there always is in establishing a system; but I think it need not be very great. Supposing the theory I have suggested to be adopted, namely, to make the public trustee practically a depository of the capital, and to leave the ordinary administration of the trust fund to the private trustee, there need not be much red-tapeism. As I explained just now, the private trustee would accept what every man of business does accept, and the responsibility and liability on his part would be comparatively small.

Mr. *Arthur O'Connor*—continued.

373. Do you think that it is possible that many persons who might make excellent trustees would be likely to decline to be associated with a public trustee?—I do not think so; I do not know why they should. I can conjecture no reason why they should object. I should have thought they would have liked it very much. It adds to their security and does not increase either their trouble or their liability.

374. As to the public trustee, or the office of public trustee, which, I think, Mr. Warmington referred to, in the Colonies, is not that limited to cases of intestacy?—I really am not able to say; as I mentioned to the honourable Member himself, my acquaintance with it is very imperfect, and I had rather not give any opinion on the subject. It would seem to be very unreasonable if it were so.

375. You would, I gather, make some distinction between the duties of the public trustee in respect of capital and in respect of income?—No, I do not say that; it was rather that in the administration of the office, if you had the two, you might very readily leave to the private trustee, who is familiar with the circumstances of the family, and would know what was right to be done in respect of them, the administration of what I might call the income of the fund; but leaving still the safety of the deposit in the public trustee.

376. Assuming, then, that the management of the income is left in the hands of the private trustee, would you break in upon your general principle of responsibility for co-trustees in favour of the public trustee?—I do not quite follow what the honourable Member means.

377. Assuming that the management and distribution of the income is left in the hands of a private trustee, would you make the public trustee in any way responsible for his co-trustee?—No, I would not, because by the hypothesis it is at the instance and desire of the *cestui que* trusts that they should be dealt with in the management of the income by a private trustee, and it would be unreasonable, I think, to make the public trustee or the Consolidated Fund responsible for that which, by the assent of the creator of the trust, or by settlement, should be left to the private trustee to do; but, as I have said, I think that the danger of misappropriation there is practically very small, because the *cestui que* trusts are always sufficiently alive to the disposition of the income; they know very well when

Mr. *Arthur O'Connor*—continued.

Quarter Day comes that their income is not paid to them, and they are not disposed to remain quiet under such an inconvenience.

378. I do not know whether your Lordship's Bill at all provided for it, but the Bill lying before you does provide for the possibility of default by the public trustee himself?—Certainly.

379. Would you make the private trustee in that sense responsible, or his co-trustee, namely, the public trustee?—Certainly not; in fact I did not do so, because there is no liability to anybody where the Consolidated Fund has paid; and, by the hypothesis, the Consolidated Fund has paid when the public trustee has made default.

380. But the default in that Bill, I think, is personal default?—Even so, the Consolidated Fund must take the responsibility of the public trustee. Will you kindly point out what you refer to in the Bill.

381. It is Clause 5, I think?—The honourable Member sees what that is; that has no reference, I think, to what he was referring to; what is referred to here is that, "irrespectively of the terms of the trust, the payment of any rent, call, or debt, or the discharge of any other liability, the public trustee shall not be liable therefor, except so far as the trust property is available to meet the same."

382. Yes; that is not what I was referring to. In that case would you make the co trustee, the private trustee, responsible for the rent?—No; except so far as the trust property was available to meet it.

383. Would you make any distinction between real and personal property with regard to the duties and functions of the private trustee?—No; except so far as the different nature of the property involved different management. You cannot draw any distinction between the liability in respect of them.

384. I see that, according to that Bill, it is proposed that the public trustee should always have a right to refuse any particular trust?—Certainly.

385. How do you think that would operate; would it operate so as to throw back into the hands of private trustees small and troublesome estates?—No, I think not; I rather think that what would happen would be this: Taking such cases as the honourable Member beside you put to me just now, where something was in respect of management, and peculiar knowledge was necessary, or familiarity with this, that, or the other subject-matter to be dealt with, I think the public trustee might say: "I know nothing about this, and I will not manage it; but if you choose to associate with me someone familiar with it, I have no objection to take the trust." That is how it would operate, I think; I do not think it would throw back the trusts on small estates more than large ones.

386. Would there be a tendency to throw into the hands of the public trustee a number of small and troublesome estates; we are told that under the operation of the bankruptcy laws the Official Receiver finds thrown upon his hands a very large number of small estates which could not be remuneratively worked by solicitors, and that the larger estates remain for administration in the hands of receivers and trustees, not official; do you think the same experience would happen in this case?—I do not know; if you give the public trustee an absolute discretion to accept or refuse, then if he found there was any system of that sort throwing upon him an undue pressure by reason of trusts being very troublesome or expensive to manage, and they were not properly administered by others, I should think he would probably refuse to take them; there is no right given to force upon the public trustee to take anything.

387. Those small estates, if administered by a public trustee, if the public trustee's office was to be self-supporting, would be burdened with fees altogether out of proportion to the assets, would they not?—That I cannot form an opinion about; it is very difficult in the abstract to answer such a question. What class of estates does the honourable Member refer to; will he give me an example?

388. I can conceive of a small estate, say consisting of leasehold property in London, the *cestui que* trusts being very numerous, the property being distributed, and yet the income not being very large, with questions of renewals of leases, repairs, and a number of things of that kind, that the official trustee could hardly look after properly?—I can imagine the official trustee refusing to accept a trust for a variety of reasons, among which that would be one example, I think, very likely.

389. Are not those the very cases in which default is made?—I do not think so.

390. You do not think that there would be a danger of those small trusts being still left to private trustees?—They might be, I really cannot form a conjecture upon that, but after all it only comes to this, that there are some trusts that the public trustee would not accept because they were too troublesome and too expensive. That would only leave things as they are at present in respect to those estates.

391. Do you think that such an office could be made self-supporting?—Yes, I think so.

392. Without the imposition of high fees?—I should think so, certainly.

393. Assuming that the system of voluntary trustees was continued, would not the cases of the 77 solicitors, which you have mentioned, be still possible; and would the establishment of a public trustee prevent solicitors or any other voluntary trustees from making default?—If you mean whether it would absolutely prevent it, I suppose that no human institution can absolutely prevent anything, but it would very much diminish the power of doing it, and diminish the opportunities. A public trustee, at all events, would be a very great guarantee against such things occurring.

Colonel *Howard Vincent.*

394. I will only put your Lordship to the trouble of one or two questions. From your enormous judicial and general experience, would you say that breaches of trust are very common and frequent?—Yes; I am afraid that is my opinion.

Colonel *Howard Vincent*—continued.

395. And that great losses result to the community at large by them?—Yes.

396. And that only a small proportion of the breaches of trust come to light at all?—I think so.

397. The action which has been taken in this matter for many years past by myself and Mr. Warmington, and also by the House of Lords and the Government of which you were a Member, is in no sense whatever directed against solicitors as a profession, of course?—Oh, dear, no. I hoped that I had explained that to the honourable Member.

Mr. *Kimber.*] I am perfectly satisfied with your Lordship's answers.

Colonel *Howard Vincent.*

398. There appears to be rather a mistake in the profession in taking the whole onus of them upon themselves?—As I have already explained, I think it is more likely to come to light when a solicitor is employed.

399. And that only a very small proportion of those cases really does come to light either judicially or in any shape or form?—Yes.

400. The Bill that was brought in by your Lordship and also by my honourable friend and myself especially provides that family solicitors, bankers, surveyors, &c., should continue to be employed in connection with any trust?—Certainly.

401. And there is no desire on your Lordship's part, or on the part of anybody connected with this matter, to supersede any professional persons of any profession whatever?—No.

402. As regards making it a great State Department with provincial public trustees, that would be entirely a matter that could be arranged when it was seen that success attended it, I presume?—I think, as the honourable Member opposite said, that according to the necessities it would expand, but it would not all, certainly, be established at once.

403. And all detail as to the remuneration of the public trustee and his officers would be a matter of subsequent arrangement when Parliament had sanctioned the creation of the office?—Certainly.

404. I do not know whether your Lordship has had communicated to you a memorandum by the Incorporated Law Society upon this matter?—No; I am sorry to say that I have not seen it.

*Chairman.*] We have only received it ourselves this morning.

Colonel *Howard Vincent.*

405. I will just call your Lordship's attention to one or two of the most salient features connected with it. I may saw that the Incorporated Law Society appointed one or more Committees upon this matter in regard to the Bill introduced by my honourable friend and myself, and the first memorandum stated that they thought there was no particular objection to that. When they thought that public opinion was coming round more to a public trustee, a fresh memorandum was issued. This memorandum, which I hold in my hand, states that "the general opinion of the

Colonel *Howard Vincent*—continued.

most competent judges anticipates for the experiment nothing but failure." That would be your Lordship's opinion?—I should like to know (I must not cross-examine that paper) who are "the most competent judges." I should dimly conjecture that it was the gentleman who wrote that passage.

406. You do not think that "the result would be to burthen the public with a costly and almost useless institution"?—I do not.

407. And you hold very strongly that there is great difficulty of finding fit persons who are willing to act as trustees, and that the risk of loss to which trust funds are exposed in the frauds of private trustees is great?—Certainly.

408. The memorandum states that persons in good social position experience little difficulty in finding trustees among their friends and connections; that would be so, I daresay?—I am not at all certain that I assent to that; I know of my own knowledge that a great many people object; and I may say that I have been asked for my advice on the subject, and I have earnestly persuaded people not to accept the office.

409. Then, even upon the memorandum before me the difficulty that people experience who are not of good social position in finding competent trustees is even greater?—Well, I have a little difficulty in answering a question which involves definitions. I do not quite know what is meant by "persons of good social position."

410. But the advantage of a public trustee would be even greater to poor people, who have saved a certain amount of money and who have not friends as a number of the rich have, than it would be to what the memorandum calls "people of good social position"?—If by that is meant rich people, of course rich people with rich friends are more likely to be in a position to be responsible than poor people; but that, after all, is a platitude.

411. And your Lordship does not think that the result of the experiment would be to saddle the public with a large and permanent burden or a large and expensive institution, but that it could be easily made self-supporting?—I should think so; but I hesitate always to express such very confident opinions, as I have not the perfect wisdom that appears to reside in that pamphlet. That is a matter which only experience could show; I should think, considering the mode in which the business could be done, and done perfectly securely, and the amount that I think would flow into the office, that it is only a reasonable thing to say it could be done at a moderate cost, and, if the trusts were very many, I think a moderate cost upon a great number of trusts would easily support it. But, as I say, I express that opinion with diffidence; it is rather a question that a commercial man, forming a judgment of the number of trusts and the cost of performing the business, ought to give an opinion upon than I.

412. It is perfectly understood that any proposal that your Lordship supported would be entirely voluntary; and that there would be no compulsion on the part of anybody to put their trusts

Colonel *Howard Vincent*—continued.

trusts in the hands of the public trustee?—Certainly not.

413. And if there were great officialism and delay took place the result would be that the public trustee would have very little to do, and things would go on as at present?—I should think so.

414. I do not know whether your Lordship is aware that the Bill which we introduced in 1890 was supported by Sir Albert Rollit, a member of a well known firm of solicitors, and also by Mr. Bradlaugh?—I did not remember that those two gentlemen supported it.

Mr. *Kimber.*

415. Mr. Bradlaugh was not a solicitor?—I think, so far as that goes, I must confirm the honourable and gallant Member. Mr. Bradlaugh was a solicitor's clerk. I can give some personal evidence on that subject. The first time that I had the pleasure of seeing Mr. Bradlaugh was in my chambers, to consult me on behalf of a client who had a claim against the Portuguese Government.

Colonel *Howard Vincent.*

416. Whether he was a solicitor or a solicitor's clerk he had a good deal of legal experience?—No doubt.

417. Some point has been made by an honourable Member as to the delay that would ensue to trust estates by being vested in the hands of a public trustee. Is there not at present great delay in the administration of many trusts by papers having to go through the post to four or more trustees constantly, and a great risk of loss?—I think that the honourable and gallant Member must take out the phrase "a great risk of loss;" I do not think that there is great risk of loss.

418. I will say, delay and mislaying of papers?—A great many papers are mislaid no doubt, but if the honourable and gallant Member refers to documents of title or anything of importance I do not think there is any delay.

419. If I may put one last question, your Lordship's strong opinion is I gather that the appointment of a public trustee, as a voluntary officer, would be a great advantage to the whole community?—I do certainly think so.

## The Right Honourable Lord Justice LINDLEY; Examined.

*Chairman.*

420. YOU have been kind enough to come and help us in our inquiry. As you are aware, we are enquiring about the administration of Trusts and the possible remedies for the evils that exist; do you think that there is much loss of money and of property by reason of trustee defalcations?—There is no doubt that there is a very considerable loss, but it is impossible for me, or for anybody else that I know of, to give you even an approximate idea of the proportion of misapplication of trust money to the enormous amount of money that is properly administered. I do not see how anybody is to get at it; there is no machinery for it. The great bulk of trust property is properly administered, there is no doubt about that, and is very well done, too.

421. But in Courts of Justice, in judicial proceedings, do these cases of defalcation and of loss often come before the consideration of the Court?—We constantly see them, they are always turning up; certainly.

422. And private trustees are exposed to a very rigorous rule of law; that is to say, things may be breaches of trust which nevertheless imply neither dishonesty, nor really unreasonable, conduct when looked at from a general point of view; do you think it is desirable to relax the law in that respect?—Yes, I think that trustees have been very harshly dealt with by the Court of Chancery from time out of mind, and the only justification for it is that they have the compensating protection of the Court; that is to say, they can always file a Bill, or bring an action for the administration of a trust, and the Chancery Judges have ridden that to a degree which I think is oppressive.

Sir *George Osborne Morgan.*

423. So as to get the opinion of the Court?—Yes, which costs a good deal of money.

*Chairman.*

424. Yes, they can get the opinion of the Court?—I understand that that is the theory of it. The Court of Chancery says, "Very well, you have committed this breach of trust; you need not have done it. Why did you not consult us, and we would have protected you against all claims?"

*Chairman*—continued.

425. Then how is it that the protection turns out to be of a somewhat shadowy nature?—Under the old practice it could only be obtained by a suit for the administration of the trust, which meant considerable expense, and the machinery was very cumbrous. That is to a great extent relaxed now, because a trustee can obtain the opinion of the Court by a summons which acts as a protection to him; but, at the same time, although that is relaxed, the judges have kept up the stringent rule of responsibility, I think, far too strictly.

426. In regard to proceeding by summons, is that largely taken advantage of?—Immensely.

427. Is it an expensive proceeding?—That is more than I can tell you; a solicitor could tell you that. I should not think it was where there is no mass of papers. If the trustee makes an affidavit which is not contradicted and asks for the advice of the Court, I should not think it was, but I cannot tell you much about the expense.

428. Your Lordship sits, of course, in the Court of Appeal, and, therefore, those summonses do not come before you?—But I have had plenty of them at the Bar; lots of them.

429. I do not question that; but they do not come much before you in the Court of Appeal?—No, we do not see much of them in the Court of Appeal.

430. You do not know from actual practice recently to what extent they are contentious?—I am sorry to say that it is 20 years nearly since I was at the Bar; but I know this as a matter of general information: that the amount of work done by summonses of that kind is very large. I cannot go further than that.

431. My only purpose was to explain why it

*Chairman*—continued.

was that I did not trouble you with many questions about the extent to which these matters are now contentious in chambers; but where they are contentious I take it that there might be some considerable cost, in relation to the sum of money at stake, at all events?—Yes; if they are contentious they cost money.

432. Do you think it would be practicable to simplify in any way, or could it be simplified, or made cheaper and easier, this method of taking the opinion and direction of the court on summons?—I cannot answer that; I do not know enough about it; that it could be made somewhat cheaper I dare say, but how much or to what extent I could not say.

433. Do you think that it would be desirable to have a public trustee established who should be permitted to act either alone as trustee, or in conjunction with private trustees in the administration of trust funds?—I think that depends an immense deal upon what the machinery was that was provided for the discharge of his duties. Putting it as an abstract question I cannot see any reason why people should not have the option of selecting an official as a trustee; but I see great difficulties in working it without great expense. But in answer to your question I do not see why there should not be an official trustee to be had recourse to in case people desire it.

434. I put this illustrative case: in the case of wills or intestacies; in the case of wills particularly, of course there is a very large sum of money which is changing hands every year under wills, and with regard to the greater part of which the main business is distributed; and the chief essential is the security of the money—that it shall not be plundered. Do you think it would be an expensive business if a public trustee were appointed who might keep in absolute security the funds and distribute them according to the judgment of the court or according to the Statute of Distributions?—The difficulty which I foresee about that, and the practical objection that I foresee about it is that I do not think the advantage would be greater than the disadvantage. So far as I can understand, and speaking from a very long experience, I do not think that money goes wrong whilst it is being distributed by executors or administrators. Where it is misapplied is, after that is over and the executors or administrators become trustees and ought to hand over the money; that is when it is done. It strikes me that if you have an official trustee or anybody else, who is a person who is not a friend of the family and does not know the facts, he cannot act except upon evidence, which means money. Take the ordinary case—supposing I am the executor of a friend, and have to pay his debts and legacies, and then perhaps invest the residue, I have as a private individual to act upon evidence that you cannot expect an official to act upon at all. I know his children. Supposing I was the administrator and had to divide his money amongst his next of kin, I should know them; and if I knew them, I should hand over the money and there would be no difficulty at all. In the simplest possible case if you draw in an official he wants evidence; he would say, "How do I know you are the children? where is your mother's and father's marriage certificate, and your certificate of birth?". That is where the shoe pinches; and I do not see how you can expect an official to do otherwise, he knows nothing at all about the matter. And that is a great blot upon our official system so far as I see. It is not the fault of the official, it is the fault of the system. You cannot do it without evidence and without precautions, which ordinary reasonable people do not want to take.

435. Supposing that a public trustee were appointed, and were to act in concert with the private trustee, or, indeed, even were to refuse in given cases to act without the concurrence of the private trustee, do not you think those difficulties would be removed; the public trustee would then be at liberty to act upon the representations and statements of his co-trustee who knew all those matters?—He might. You might make an enactment which would enable him to delegate his power to his co-trustee if there was one. If he was sole trustee, of course that could not be done. If he was a co-trustee, he might be empowered to let his co-trustee manage everything except the actual division of the money. My own impression is that the official's duty should be confined to the protection of the capital; the moment you get beyond that I think you get into very great delay and expense and almost a stoppage of the ordinary routine of business. To protect the capital is a comparatively small matter.

436. In regard to the protection of capital, that of course would be protected if his consent were required with regard to money being paid out and invested in his name; do you think that it would be desirable to limit it in that way?—If there were an official trustee, I think it would be advantageous to divide the cases where he is the sole trustee from those where he is a co-trustee. If he is sole trustee, he must act like any other trustee; and I do not see why if anyone likes to have an official for sole trustee they should not appoint him. If he is a co-trustee, I think his duties should be limited to requiring notice of any application of capital, even of an investment; and he should be empowered in case of need, if money was to be actually received, to insist that it should be received in his office and distributed from that office. Money cannot be misapplied by trustees until they receive it; and if there were a sole trustee, a sole private trustee, I think it would be judicious if that sole private trustee were to announce the fact that he is sole trustee to the official trustee, so that the official trustee might know what was being done with the money when it was being distributed by that sole trustee.

437. Do you think it would be desirable, for example, to enable the court, on the application of any person interested, or even of its own motion, when matters came before the court, rendering it desirable, in their opinion, to add for security the public trustee to a private trustee?—I have such respect for the court, and for the discretion exercised by the judges, that I should be disposed to answer yes. I do not think they would often exercise it unless it was a proper case.

438. Supposing that the court from certain circumstances, or upon the application of a person who was really apprehensive (say the *cestui que* trust), saw that there was ground for apprehension, do you think that it might intercept possible defalcations

*Chairman*—continued.

defalcations by summoning the assistance of the public trustee?—I think I should be disposed to extend it to the *cestui que* trust. If there were any such official, I would give power to the *cestui que* trust to give notice to the public trustee that his attention was required to the execution of the trusts. It would act as a stop order practically.

439. You were speaking of the sources of expense that were involved in officialism, and one main ground upon which you referred to that was that the public trustee would require to act more or less upon strict evidence?—He would require more formal proof.

440. There would be more formality necessarily, from the nature of the case. that is to say?—I think so.

441. Do you think that there would be any other source of additional expense?—Yes, I think that there would be delay. I suppose it would work, but it is rather difficult to foresee. I suppose that people would have to get an appointment and then wait their turn, and then they would have to attend either by solicitors or their clerks, all of which means money. Nothing can be done in a public office of that kind without money, and I do not quite know how it is going to be made to pay. It is a practical question; every step in a public office of that sort will involve money. If people had to do it themselves it would be intolerable. If I were a trustee and had to go to the official's office and wait about until my turn came, and perhaps be adjourned to the next week, it would be intolerable. I must go to a solicitor, and he must either go or send his clerk to do it for me, and that all means money.

442. Do you think that if such an appointment were made, in a little time there would be a sort of routine established?—I should think there would.

443. It not being business of a judicial character which would require the representation, so to speak, of both sides, but being administrative, it might be done in the same sort of way as the Official Receivers now deal practically with the business that comes into their hands and the properties that come into their hands?—I do not know enough about the mode in which they discharge their business to say; I really do not know upon what evidence the Official Receiver acts, or how he does his work or anything about the expense; I have never seen behind the scenes.

444. Would you think that such an official ought to be under the control of the court as an officer of the court?—Yes; certainly.

445. You think that would be desirable?—Certainly; he certainly should not be the officer of any Government Department, either the Treasury or the Board of Trade, or anything of the sort.

446. Probably you would think that he ought to be attached in the same way as the officers in the different Chancery Judges Chambers are attached, to one particular judge?—I do not know about his being attached to one particular judge.

447. I mean to the chambers of one particular judge?—I should think that he should be an officer of the Chancery Division, and probably he would have clerks, one of whom might be attached to each judge, and so through them any judge could get at him.

448. Would you recommend or think it desirable that he should be able to have access to the judge in order to take the directions of the judge upon matters of law, and upon any questions that might arise?—Yes.

449. Without any formality of summonses?—Certainly.

450. Unless adverse interests were involved or litigation or quasi-litigation?—Yes; I would put him into close communication with the judge.

451. Having regard to the difficulties that you have spoken of, and the possibility of difficulty with regard to expense, of acting on evidence and so forth; I suppose you would think it desirable that he might decline any difficult administration of property, as for example the management of a business such as an insurance broker's business; that would be almost practicable, would it not?—I would not let him touch such things; I would not give him the option.

452. But the courts always do that?—They always appoint receivers and managers; I would limit the duties of the official trustee. I would not let him carry on businesses or anything of the sort.

453. Even for temporary purposes, the courts have been rather reluctant, have they not, to appoint managers?—They never do, except as a temporary arrangement with a view to a sale; they cannot, of course.

454. Supposing that there were a discretion in the trustee, a power to the trustee to refuse all work of that kind, and trusts of that character, there are, are there not, a very large number of trusts which really would involve no considerable expense either of getting evidence or otherwise?—There are for a time. In the ordinary trusts under a marriage settlement or a will to pay dividends to a man for life, and then to his wife, and then to his children, until the time for distribution comes, there is no particular duty to perform. The moment the tenant for life dies, of course the official trustee would want to know who was the next tenant for life, and then would come the difficulty of requiring evidence and so on. But that is a very small proportion of the trusts. There are numbers of trusts of a different kind that involve discretion and judgment; that is a totally different class of cases, which you would find it very difficult to exercise.

455. In those classes of trusts, requiring judgment and discretion, it would be most necessary, or, at least, desirable, would it not, to have associated with the public trustee some member of the family or some other person recommended by some member of the family?—Yes, I should think it would; but if he is to control that member of the family, I do not see that the latter is of much use.

456. Do you think there would be the same reluctance which we have heard there is now on the part of persons to take the position of trustee if they were relieved from the unreasonable importunity of the *cestui que* trusts in the direction

*Chairman*—continued.

direction of breaches of trust, if they knew that the property was in the hands of a public trustee, and that all they would be required to do would be to give him advice, and assist very substantially the *cestui que* trusts by the exercise of their discretion, being friends of the family? I think that the reluctance that there is on the part of persons to accept trusts is the great burden in the shape of liability, and, of course, the importunity from families to commit breaches of trust. Whether the appointment of an official trustee would reduce that I hardly know. I do not think I should care to have an official trustee as my co-trustee in an easy case. If I had a very tiresome *cestui que* trust, who was always teasing me, I might be very glad to throw the burden upon him and get out of it myself.

457. In the great bulk of trusts I suppose that all goes smoothly enough, with the exception of the risk of defalcation and misappropriation?—My own view is that the trusts are rather too rigid. I should like to see an enactment (it could not be done except by Act of Parliament) giving the Judges of the High Court in the Chancery Division power to commit judicious breaches of trust. I was brought up in the chambers of one of our best equity men, Lord Justice Selwyn, a very good equity lawyer, and a first-rate business man, and he used to impress upon his pupils the doctrine that the only use of a trustee was to commit judicious breaches of trust. I do not say that I acted upon that when I was advising my clients; but there is an immense deal of good sense in it; and I think that the importunity that arises might be got rid of very much by giving the *cestui que* trust or the trustee power to apply to the Court to depart from the rigid letter of the trust if it was really for the benefit of those primarily interested in the trust funds.

458. That would require the sanction of the Court in each case?—Yes.

459. It could not be done safely without?—It cannot be done safely without, and you must have an Act of Parliament to authorise it. I think it would be an immense boon. It is analogous to the power which the Court now possesses of relieving a married woman from the fetters of the clause restraining anticipation; with the sanction of the Court that can be relaxed, and I would extend that power. I would do it upon this ground (I have thought upon it a great deal; I do not know whether anybody else has ventured to go so far, it is a very radical idea) that it is impossible to foresee what will happen. Twenty-five years afterwards something occurs that the testator never dreamed of; what is to be done? You are tied down by what he could not foresee, you have no power to get out of it. I think that the power to commit judicious breaches of trust with the sanction of the Court would be an immense improvement in the law of trusts.

460. You would not carry it, I suppose, to the extent of altering the persons who should receive benefits under the trust?—No, I would not go so far as that; it is rather with respect to investments and what may be done with the money. They are too tight.

461. The methods of administration, you mean?—Yes, they are too tight. I should like to have an implied power to the tenant for life, with the consent of the settlors, if alive, or with the sanction of the Court, if they are dead, to revoke a trust, not disappointing the subjects of the trust, of course, but to relax the rigidity of the instrument. I think that would be an immense boon.

462. And also you said that you thought that the liability of trustees and the harshness with which trustees are handled by the Courts now might be relaxed?—Yes, I do think so. I think there is a tendency to relax it ever since, well, the last 10 or 15 years. Ever since the decision of Speight *v.* Gaunt in the House of Lords, there has been a tendency to be a little more reasonable. Trustees have not been regarded quite so rigidly as insurers. Why they should be so regarded I do not know. I can only explain it by the doctrine that they can go to the Court for advice if they want it; but since then there has been a tendency, as I say, to be more merciful, and a good many things now pass muster that would not have done so 30, 40, or 50 years ago.

463. Do you think, with Lord Halsbury, that while he agreed that there ought to be a relaxation of that kind, he did not think a relaxation of that kind ought to take place unless it was accompanied by the establishment of some public trustee?—I would give that by giving the Court power to relax it; that is how I should do it. I would do it by giving trustees power to commit judicious breaches of trust with the sanction of the Court. If you gave them that they would not run those risks and get into these messes that they do. It would be an immense protection to the *cestui que* trust, who asked trustees to commit a breach of trust which is eminently judicious, if the trustees, instead of saying, as they must now, "No, that cannot be done," could say, "Very well, we will ask the Court, and if the Court sanction it, we will do it."

464. Lastly, I wanted to ask you about something that you said; you said that there would be, or might be, a danger of delay, and, of course, every one would agree with that; but that is a mere matter of administration to get rid of, is it not?—It is a formidable matter. I do not know how the office would work, but you must work it, I suppose, by giving an appointment. A great deal can be done by correspondence, but you would have to have appointments, and then you would have to fix times, and people would have to go to the official trustee. You could not expect the public trustee to go to see the *cestui que* trusts. Of course, solicitors go and see clients, and save an enormous amount of money in that way; but a public trustee could not do that. It would mean delay, too. And a great deal would depend, of course, upon the fees; fees mean deductions from the trust fund to some extent; and then, if there are to be fees, and if the Chancellor of the Exchequer, I do not mean now, but hereafter,

*Chairman*—continued.

after, was to go levying a tax in the shape of stamps; that, I think, would be very unjust.

465. That is a matter of policy; but I do not suppose it would be contemplated to make it a source of revenue at all. But does not the point of delay, like the point of expense, depend largely upon the character of the trust which should be taken over by the public trustee. If he were, at all events, to commence with, to judiciously limit his acceptance of trusts to those which really relate to the holding and distributing of receipts of funded property and other property in safe securities, those delays would not arise so much, nor would so much expense arise; is not that so?—I cannot tell what the working of the office which is to be established would be. I do not think anybody can fortell it. It would depend a great deal upon the staff, which means expense. I suppose the Government would have to pay the office salaries, and so on, and they might be niggardly or they might be liberal. A good deal would depend upon that, I mean as to whether it was undermanned or overmanned.

Sir *George Osborne Morgan.*

466. You said just now that you would not care to be associated yourself with a public trustee; and I can well understand it?—That depends upon the circumstances.

467. Do you not think that this yoking together of a private trustee and a public trustee might in some cases lead to a good deal of friction and consequent inconvenience?—I think it might if the official trustee were to consider himself as in the same position as a private trustee; that is to say, if he felt bound to look into everything and check his co-trustee it would produce an immense amount of friction, delay, and expense; but if he was empowered to say: "Now that I have a co-trustee associated with me, I will leave him all the details of management except parting with the capital." That might work.

468. In fact, the public trustee would have practically to lean, except so far as regards the preservation of the capital, upon his co-trustee?—I do not think he ought to have anything to do with the management of income except in special cases. Of course, if he is sole trustee he must have.

469. Do you think if the official trustee were appointed, with permission to any one to apply to avail themselves of his services, many people would be found to do so?—I do not know. I think they would if they got into difficulties. I do not think they would at first.

470. I am afraid the experience of the Land Transfer Office does not tend in that direction, does it?—I do not know what goes on behind the scenes in the Land Transfer Office. I do not think much is done there.

471. You are aware, I daresay, that a Select Committee sat some years ago to consider the operation of Lord Cairns' Land Transfer Act, and they came to the conclusion that people were deterred from availing themselves of it by exactly the same difficulties which you have suggested in the case of the appointment of a public trustee; that is to say, the delay, the expense, and the formalities to



Sir *George Osborne Morgan*—continued.

which they would be subject. Do you think that the same causes would operate to prevent persons availing themselves of the services of a public trustee?—I think they would. I do not see how you are to consult an official trustee without extra expense and delay too.

472. Of course, the Court will never appoint a sole trustee?—No, it ought not.

473. And it will never allow money to remain in the hands of a sole trustee?—Yes, it would allow that; there is plenty of money remaining in the hands of sole trustees. But I think the sole trustee ought to report it to the official trustee at once. I am a sole trustee, and cannot get anybody to be my co-trustee; that is because I have very troublesome *cestui que* trusts.

474. I am afraid that, like myself, you remember the time where practically the cost and the delay of a suit for administering trust funds was prohibitive, except in the case of large estates?—Yes; but that has been altered.

475. Of course there has been a very great diminution in the expense; and the delay, too, has been very much reduced?—Yes, immensely, by the system of summonses.

476. Now the county courts have jurisdiction up to 500 *l.*, I think?—Yes.

477. Would you extend that jurisdiction?—I should think 500*l.* is about enough.

478. I believe Registrars of the High Court now are established in local centres?—Yes.

479. And they, I suppose, transact a good deal of business, do they not?—I have no personal knowledge which enables me to answer that question. On the general question, I should say yes.

480. And there are various other new ways which have been devised for relieving trustees. Under the old Trustee Relief Act the trustee can pay any money into Court now without the least difficulty, can he not?—There is a difficulty about that, that if the Court thinks he ought not to have done it he has to pay the costs. I was going to suggest that there ought to be greater facilities for a trustee to get out of his office.

481. But it is very seldom that the Court compels trustees to pay the costs of paying money into Court, is it not?—It is not often; but that is expensive when orders have to be made. You have to get an order to pay the dividend to the tenant for life, and when he dies you have to prove the title of the next man. It all costs money.

482. You spoke of relaxing the law relating to the liability of trustees; would you go so far as to say that a trustee acting *bonâ fide*, and taking as much care of his trust property as a reasonably prudent man would do of his own, ought to be exempt from liability?—I think that is the tendency. I think I should accept that as a principle. It would, of course, require a good deal of care in expressing it in language.

483. You are aware, I believe, that public companies now undertake the office of trustees?—Yes.

484. Do you know of any case in which any loss to a trust estate has been occasioned in consequence?—I do not know anything about the

Sir *George Osborne Morgan*—continued.

the working of that; I have no experience at all of it. I have never seen any case judicially, and I do not know.

Mr. *Kimber.*

485. Your long judicial experience and also your previous experience at the Bar has been, I think, in that Division of the Court, the Equity side, which has special dealings with all trusts?—Yes.

486. In that respect you have the advantage of the present and the late Lord Chancellor, whom we have had the pleasure of having before us?—If it is an advantage, yes.

487. For the same reason you will have had to take cognisance of the constitution and provisions of trusts?—Yes.

488. Do I gather correctly (I am endeavouring to generalise into one question what you have told us) that you consider that while the mere act of safe custody and distribution of capital might be put into the hands of an official trustee, all the other many duties of a trustee, those especially of a discretionary character, which I might perhaps enumerate in one sentence, powers of leasing, sale, and exchange, granting mining taxes and carrying on business such as that of farming, mercantile, or manufacturing, and the making of settlements on children and the advancement in the world of children, consents to marriage, powers of maintenance, and the like; all those discretions would not be workable through an official trustee?—No, I do not think they would.

489. Without very considerable expense at all events?—I do not think they could.

490. For the reason, principally, that the official trustee probably would be a stranger to the persons, and would be obliged to act upon evidence in the same way as the judges do in their Courts and Chambers?—Yes, I think so.

491. At all events, if he were vested with those discretions I imagine that you would not permit him to act on the mere verbal *ipse dixit* of *cestui que* trusts for his information?—I do not know about permitting him—that is one of the difficulties of the case. He would not know anything about the *cestui que* trusts, and if he was a prudent and cautious man he would be slow to act if it was not better proved to his satisfaction than that.

492. In the Bill which was brought in in 1891, without troubling your Lordship with the whole provisions of the Bill, there was one provision which provided that where the trust properly held by the public trustees was of such a nature as to involve "the payment of any rent, call" (that is call on shares), "or debt, or the discharge of any other liability," the public trustee should not be liable, except so far as the trust property was available to meet the same. That was Clause 5 of the Public Trustee (No. 2) Bill, of 1891. What do you say to that?—He ought not to be personally liable. It would be most unjust to make an official liable to calls in respect of all shares put in his name. I do not think they ought to be put in his name; he ought not to have anything to do with them.

Mr. *Kimber*—continued.

493. Then, at all events, any trust which involved the holding of shares carrying with them a personal liability, you would not permit him to take?—No.

494. Either at his own risk or at that of the State?—No, I would give him power to transfer them as executors have, without taking them; but I would not have shares liable to calls put into his name.

*Chairman.*

495. You would give him power to change the investment with the approval of the Court?—Yes. There are certain clauses called transmission clauses, which enable executors and others to transfer investments without having them put in their name.

Mr. *Kimber.*

496. An official appointed for so large and important a purpose as this would have to be a man of some dignity and ability, and would require a substantial salary, would he not?—Well, he ought to have it. I do not mean that quite in joke. This official trustee would have an enormous amount of money under his control, and you must have him paid properly, or you may have him defaulting.

497. Should he give security to the State for fidelity?—No, I do not say that; I do not see how he could. Supposing that I was the official trustee and this experiment succeeded, I should have some millions in my control. How could I give security? You could not expect it.

498. But as a set-off against that the individual would have to be well remunerated?—Yes, as I put it, to be beyond the reach of any desire to misappropriate.

499. And he would be obliged to have a staff of sufficient responsibility and character commensurate with the importance of the property committed to their charge?—Certainly, I should let him appoint his staff, of course with the sanction of the Treasury, because they would have to pay them; but I would let him select his own men.

500. May I suppose a figure. If 100,000 *l.* of trust funds in the first year came into the hands of the official trustee, and the starting expense of the office was 3,000 *l.* a year all told, rent, salaries, and office expenses, 3,000 *l.* upon 100,000 *l.* would be 3 per cent. Do you think that any trust fund, or the owners or families who have trust funds would consent to pay such a rate as that, or even half of it, for the pleasure of having an official trustee who could only perform the office of custodian, and not assist them by the exercise of the usual discretions which trustees have to exercise?—When you come to cost I am not a very good witness; I do not know how it would work, but I can foresee this: that unless the percentage was made low it would be a tremendous tax upon the *cestui que* trusts.

501. And upon the State?—Upon the State in one way, and upon the *cestui que* trusts in the other.

502. If the charge is low to the trust it will be correspondingly a burden then to the State, and *vice versâ*?—Yes, of course.

503. Unless

*Chairman.*

503. Unless it paid its way?—Yes; if it paid its way with small fees, or a small percentage, all well and good.

504. That depends wholly, does it not, upon the amount of business?—Yes, and the amount of percentage.

Mr. *Kimber.*

505. But under this plan the State would have to start with a certain loss, and the risk of continued loss?—I really cannot say. I cannot foresee to what extent it would be used by the public. There is the expense, of course, to start it.

506. And the outlay would be incurred before it was ascertained whether it would succeed?—Of course it must be.

507. On that same Clause 5 there was one question which I forgot, and that is this: Supposing the official trustee to have bank shares or insurance shares with a large liability, and he is exempted from liability to the company or its creditors, would not that be very unfair to the other shareholders in that institution?—He should not hold them. I would not let him hold them. I said that distinctly. It is perfectly monstrous.

508. Then if you do not let him hold them, there is nothing to which that clause could apply?—No, I do not know that there is.

Mr. *Arthur O'Connor.*

509. There would be no question, would there, but that the use of the public trustee would be purely optional?—I do not know that. I do not know why a *cestui que* trust, or the trustee who wanted to retire, should not have the power to hand over to him the trust, subject to this: that it would give him liberty to reject anything like onerous trusts exposing him to personal liability. I would not let him have that. But I do not see why a *cestui que* trust or trustee appointed should not, if he desires it, have an official trustee; and I do not see why the official trustee should be at liberty to refuse unless there was that onerous burden. I think half his utility would go if it was at all doubtful whether he could be made use of or not.

510. If it is not to be optional, how could you maintain the distinction between the *corpus* and the income?—I meant optional in this way: that, of course, I would not force *cestui que* trusts to make use of him, and I would not force settlors to make use of him. I was addressing myself to his option to accept trusts or not to accept them. I would not give him any option, except to reject such trusts as he had no business to interfere with. I think we were applying the word "option" to different people.

511. Let me suggest a case to your Lordship of a *cestui que* trust, whose trustee is the surviving partner of the testator, and who desires to have a public trustee associated with the private trustee. Would it be possible for the public trustee in that case to discharge any effective duty to the *cestui que* trust if he could not take before in the administration?—No, I do not think he could; he would have to leave that to his co-trustee.

Mr. *Arthur O'Connor*—continued.

512. In that case the appointment of a public trustee would be nugatory, would it not?—I do not think it would work except to this extent: that it might protect the ultimate dealing with the shares in the partnership, or whatever it was that was realised, and when realised; but he could not be expected to work the business at all; he could not do it.

513. Then it would be almost impossible to speculate, with any feeling of certainty, as to the proportion of the whole field of trusts which the public trustee's functions would cover?—The idea that I framed in my own mind would be to limit him to the protection of capital, except where he is the sole trustee when, of course, he must do everything.

514. He is to be the cutodian of the capital or the *corpus*, at the option of the creator of the trust or of the *cestui que* trust?—I do not know that I would go so far as custodian. If you gave him the power to require notice before the capital is dealt with, and to require information of what was being done with it, so that he could stop any malversation, I think that would be enough without turning him into the custodian.

515. In any sense his consent and co-operation would be required for a multitude of details where the question of advance arose?—I would keep him out of that. If he was not sole trustee I would let that rest with his co-trustees. I do not see how you could expect an official to exercise discretionary trusts. I should leave that as it is. You can go to a judge if there is any difficulty. If he is sole trustee he must of course do everything; but then he can consult the court.

516. But having regard to the delay and formality and costs of applications to any public official, would not you be inclined to say that in all probability the great body of *cestui que* trusts would have a diminished income?—I do not see how it is to work, except at the expense of the trust estate. I do not understand that it is contemplated that the State should bear all the expense of this institution.

517. And it might possibly be that the loss to the whole body of *cestui que* trusts would be equal to, if not greater than, the loss which now is observable from defaulting trustees?—I could not make a guess at that.

518. The remedy might be as bad as the disease?—I think, if care were not taken, the remedy would be quite as bad as the disease; but, if proper care is taken, the remedy may be, I think, not quite as bad as the disease.

Mr. *Butcher.*

519. I gather that, in your opinion, the main advantage of a public trustee would be to secure the safety of the capital of trust funds?—Yes, that is where the robbery goes on.

520. As regards the cases that come before the court, am I right in supposing that a large number of cases of loss are due to improper investment of trust funds?—A good many come from improper investments; a good many come from downright frauds. We see both, of course.

521. Those are the two main heads of the cases of loss?—Yes, I think so.

Mr. *Butcher*—continued.

522. Improper investments, either made wilfully or made innocently, but due to an insufficient mortgage?—I should think that if you roughly divided them, they might be divided into those heads mainly.

523. And all the loss of trust funds which is due to those causes would be avoided by the appointment of a public trustee, would it not?—The investments I do not know about. An injudicious investment, he might prevent that, of course; he might have a veto on that.

524. The case of misapplication would be avoided, would it not?—Yes; that is where, I think, his use may be expected to come in. I think he might stop a good deal of that.

525. Those are cases which arise very often, are they not, owing to there being one trustee left?—Yes, I think that is the danger; I do not say the sole danger, but the main danger.

526. And the cases of improper investment would be probably minimised or reduced?—Yes, I think they would.

527. I understand that you would object to giving a public trustee power to administer the estates of deceased persons as executor or administrator?—I think so; I think the remedy there would be worse than the disease.

528. On account of the largely and necessarily increased expense?—Yes.

529. But when once an estate had been administered, and the balance arrived at, would you object to handing over the balance to the public trustee on the trusts of the will?—It would then be like any other trust; I do not see any objection. I have pointed out the disadvantages and the advantages of that.

530. And in cases of simple trusts the effect of that, as you have pointed out, would be to minimise the risk?—I think so.

531. The same would be true, would it not, of marriage settlements; there would be no objection to handing over trust-funds of marriage settlements from the outset to the public trustee for him to administer the capital, would there?—It would be in the same way. I do not think you need to go so far as that. If you enable the *cestui que* trusts or trustees to invoke his assistance, or enabled one of them to invoke his assistance, when the capital was being dealt with, I think that would be quite enough.

532. Then you spoke of a power of the court to sanction judicious breaches of trust?—That is an idea of my own that I attach some importance to.

533. Do you anticipate that that would encourage a large number of applications to the court in cases where really the court cannot be properly asked to interfere?—I do not think it would. I do not think the trustees would make the application (the *cestui que* trusts would not, because they would have to pay the expense if they failed), unless they thought it ought to be done.

534. At any rate the power of the courts as to costs might be used to discourage improper applications?—Yes.

Colonel *Howard Vincent.*

535. I gather that your experience leads you strongly to believe that the community suffers very much from breaches of trust?—"Very much" is relative. That it does suffer is unquestionable; but, as I said before, it is impossible for me, or anybody else, to form an idea of the proportion of losses, specially by fraudulent breaches of trust, to the enormous mass of property which is properly distributed. But there is no doubt that there is a good deal.

536. And no doubt only a small proportion of the breaches of trust that occur come to light?—I think that is very likely.

537. Your Lordship is aware that the proposals which have been made in the House of Commons by the late Government upon this matter were not at all directed against the employment of solicitors, but on the contrary the Bill provides that family solicitors, bankers and surveyors should continue to be employed?—Yes, I know that; I doubt very much whether the appointment of an official trustee would be detrimental to solicitors; there would be such an enormous amount of work to be done through solicitors, in order to get at him, that I am not at all sure that it would not be to the benefit of the profession. I take it that *cestui que* trusts and trustees would not go waiting about his office; they would employ solicitors; and that would throw an enormous amount of work into their hands for a time, if it was a successful experiment.

Mr. *Warmington.*

538. You have spoken to us about the rigidity of trusts?—Yes.

539. You suggest a dispensing power which should be committed to the Court of Chancery?—Yes.

540. Is there such a thing as rigidity of decision in the Court of Chancery?—Yes; I think there is.

541. Would you not be likely, by departing from rigidity of trusts, to get, in a few years, into rigidity of decisions?—Well, I should hope not, I do not know; that depends upon the personality of the judges.

542. Has not that been the tendency?—I think that the tendency has been immensely corrected within the last few years.

543. The tendency to rigidity of decision?—Yes, I think so; in discretionary matters, I mean.

544. Have you had any experience where there has been such a dispensing power?—Except in the Married Women's Property Act I do not know of any.

545. Under the Married Women's Property Act is it not the case that in the courts the decision of the judges upon that very section are quoted over and over again?—Upon my word I did not know that. We have dispensed once or twice with it in the Court of Appeal, not very easily, mind you.

546. As soon as a judge has given his decision, it is reported and it becomes a precedent, does it not?—Those things are done at chambers and they do not get reported, I think.

547. I was going to suggest to you that the rigidity of a trust could be better relieved by an official rather than by a judge, supposing that you

Mr. *Warmington*—continued.

you get the right man?—I do not think so. A judge would be a bigger man; and you want a big man to exercise a wise discretion.

548. But would not a person who is not a judge be better?—He would be timid; he would not dare to take the responsibility upon himself.

549. You do not think that there would be a danger of a judge following himself?—I do not know about that, I am sure. I must say that I think a judge ought to, and I can conscientiously say that I do, consider each case upon its own merits. In cases of discretion I do not care in the least what I said the day before.

550. But in exercising this dispensing power do not you think there would be a tendency to fall into precedent; into a line?—I think that the danger of that has very much diminished since the Court of Appeal has consisted of a mixture of Common Law judges and Chancery judges. One of the great benefits of the Judicature Acts has been in mixing us up. We have got out of grooves with their help into which we had got before.

551. Is there any other suggestion that you could make to the Committee whereby the liabilities under which trustees now labour could be probably reduced?—That would require a great deal of thinking out. On the general principle I think I have already spoken in answer to Sir George Osborne Morgan; but how to express it in language would require a great deal of care, but at the same time I think it might be done.

552. As a matter of history, the liability of trustees is principally founded on judicial decisions, is it not?—Yes, certainly.

553. And for the last 50 years Parliament has expended its power in trying to relieve trustees from the liabilities so created?—Yes, and I think it might go a little further.

554. And I rather gather that you suggest that judges should go a little further?—I personally go as far as I dare, with the House of Lords above one, you know. I may take a little credit to myself, because that case of Speight *v.* Gaunt was decided by the late Master of the Rolls, Lord Justice Bowen, and myself. It was thought a little bit of a stretch, but the House of Lords upheld us; and, so encouraged, we might go a little further next time.

555. Supposing that a public trustee were appointed, may we understand that your view would be that he should be prohibited from taking what we call discretionary or personal trusts?—I could not go so far as that, because if he were a sole trustee he must do that.

556. Would you then allow him, as sole trustee, to accept those trusts?—Yes, I would, because he could apply to the Court if there were any difficulty.

557. And if he could apply to the Court in case of difficulty that would be a business-like way of proceeding?—Yes, I think so.

Sir *Henry Roscoe.*

558. I understand that you propose that the public trustee, if appointed, should have a power of refusal of taking up a trust?—Yes, such trusts as I think he ought not to have.

Sir *Henry Roscoe*—continued.

559. How would he, in your opinion, obtain the particulars of such a trust as to enable him to judge how far it was one that he could undertake or one that he could not undertake?—I should think, speaking generally, that the instrument creating the trust would show him the kind of trust. For example, a trust to carry on business he ought to refuse at once, and a trust to hold shares on which there was a liability.

560. And you do not think that that would necessitate a great amount of delay in carrying out the trust?—No, I do not think it would.

561. Supposing that under a trust the public trustee were appointed to act alone, does it not often occur that the action of the trustees must be immediate; in the case of a will, for example, where the action begins on the death of the testator, would it not necessarily produce a considerable amount of delay; and how could that be avoided?—The duties which commence immediately are rather the duties of executors than of trustees. The executors have a year to what I call wind up the estate; and the duties of trustees as distinguished from the duties of executors are not so urgent. It is the executors who have to do something directly, and I would not have the official trustee an executor. I think that would be a nuisance.

562. He is not to undertake the duty of executor, then?—I think it would be a nuisance to make him an executor. You have got an administrator, and there is no difficulty in getting an executor or an administrator either with the will annexed or in the case of intestacy; and he can do that part of the work better than an official trustee could.

563. Do you think that if this arrangement were made it would be necessary to have more than one office throughout the country, or would one office in the metropolis be sufficient?—If the experiment were successful one office in the metropolis would not be sufficient, I should say.

564. Then in whom would you place, for instance, in the provinces, the office of a public trustee?—The thing might grow. Perhaps at first you might employ the registrars of the High Court for a little while; but, if it became a big business, of course it would expand, and they could not attend to it. If it was really a large business (take, for example, Manchester), they would want an official trustee of their own, a deputy or whatever you call him.

565. As regards fees, do you think it would be possible to name a given fraction which should not be exceeded in the payment of the expenses of the official trustee. The case put by the honourable Member of the payment of three per cent. seems quite out of all reason?—I think it would be very difficult to fix the percentage before you know whether the experiment is going to succeed or not; but I should think that a person more skilled in figures and calculations than I am, could make a percentage; and I do not see that the percentage at first adopted need be adhered to; it could be modified by some rule.

566. Would it in your opinion be desirable that the first charges on such an office should be

Sir *Henry Roscoe*—continued.

paid out of the Exchequer?—In the first year they must be, so far as I can see.

567. They might not if the calls upon the trust funds were not limited?—You must start it; there might be very considerable expense at starting the thing, which the Government of course must pay; and they must get it back out of the fees as they come in; you must start the thing so that the public may avail themselves of it.

568. And for some little time it might not prove to be self-supporting?—It might not, of course.

Colonel *Howard Vincent.*

569. Just one more question, if your Lordship will forgive me: trusts might be handed over to a public trustee either by a testator, a settlor, a trustee, or a *cestui que* trust, might they not?—Yes.

570. Would your Lordship also give that same power to a remainder-man; that is to say, to anybody having a reversionary interest and therefore very much interested in the maintenance of the *corpus* of the trust?—I would as to the *corpus*. I have expressed my opinion over and over again that the duties of a public trustee should be limited as far as possible to the *corpus;* I would give the remainder-man power to call in the official trustee to protect the *corpus* if he thought there was any danger.

571. Your Lordship is of opinion that the appointment of a public trustee would be a general advantage?—If properly limited. I am cautious. I think he might be a perfect nuisance; but, if properly limited, I think he might be a public advantage.

572. And it would not be difficult, would it, to properly limit him?—I do not think it would be difficult.

*Chairman.*

573. May I ask you one question in order to inform us about this: I quite understand your view that his duties should be limited and that the main purpose should be the preservation of the *corpus* of the property; but would you advocate rigidly prohibiting the public trustee from acting in a particular trust, or merely make it an exceptional transaction, having regard to the uncertainty of the class of cases that might arise?—I do not think you could prohibit him altogether. If the scheme extends to making him a sole trustee, I do not think it is possible. If he is sole trustee and gets into difficulties he would be obliged to go to the court for assistance; that is how I should work it out; but I would prohibit his holding shares subject to calls, and such things, of course.

574. Would you prohibit his acting as executor or administrator, or would you merely intimate that it is a thing that ought only to done in particular cases?—I would not prohibit a man from appointing the official trustee as his executor if he liked; I think he would be very unwise if he did, but I would not prohibit it.

575. Is there anything else which you would like to say?—In reading through these Bills, which I have done, I think that in all I have seen there is a suggestion that the rules of this office should be made by the Lord Chancellor and the Treasury, or by the Treasury and the Lord Chancellor. That appears to me to be radically wrong. The rules ought to be made by the Rule Committee, but of course, so far as regards payments, with the sanction of the Treasury; but the authority to make rules, I think, should be the Rule Committee, and not a Government Office.

*Monday*, 11*th March* 1895

MEMBERS PRESENT:

Mr. Attorney General.
Mr. Butcher.
Dr. Farquharson.
Mr. Heneage.
Mr. Kimber.
Mr. Arthur O'Connor.
Colonel Howard Vincent.
Mr. Warmington.

MR. ATTORNEY GENERAL IN THE CHAIR.

The *Chairman* read the following letter from Lord Justice *Lindley*:—

"Royal Courts of Justice,
9 March 1895.

"My dear Attorney General,

"SOME of the objections which I pointed out might be met by a clause to the following effect:—

The official trustee may receive as evidence and act upon any information which he thinks reasonably sufficient.

"Perhaps a rule could be made to this effect; but a clause in the Act would be much better.

"Would you be good enough to communicate this to the Committee, and, if proper, have it printed as part of my evidence.

"Yours faithfully,
'*Nathl. Lindley*."

Mr. WILLIAM MELMOTH WALTERS, called in; and Examined.

*Chairman.*

576. YOU are acquainted, I believe, with the order of reference under which we are sitting?—Yes.

577. You are a solicitor?—Yes.

578. And you have been 40 years in practice, or about that time?—Not far from that.

579. And you have been President of the Incorporated Law Society?—Yes.

580. I believe the Incorporated Law Society has had under its consideration the question of the appointment of a public trustee?—Yes.

581. Can you tell the Committee when that subject first came before the consideration of the Incorporated Law Society?—If you will allow me to refer to a statement I made a little time ago on the occasion of giving an address at Plymouth, I stated the dates there.

582. If you please, I am going to ask you about that statement in a minute?—I think I may say, generally, that the attention of the society has been called to these schemes in and since the year 1887.

583. I believe when you were President you delivered a Presidential address, in 1891?—Yes.

584. Which probably represents your views?—Yes.

585. Then perhaps you will be kind enough to read from that address what you think is material to our present inquiry?—I will read the parts which are material: "The appointment of a public trustee is a subject which has been much exercising the minds of the profession. There has for some time past been a wide-spread feeling

*Chairman*—continued.

in favour of some scheme or device for the establishment of a public or *quasi* public functionary, who may be appointed to act as trustee or executor in cases where a difficulty is found in providing suitable private trustees; or where a settlor or testator desires absolute security for the trust funds, and to avoid the recurrent expense and trouble of appointing new trustees, or in cases of charitable or other trusts of a permanent character; and there is much that commends itself to the settlor or testator in the consideration that such a trustee never dies, never goes abroad, and never becomes incapable. Trustees themselves also, in many cases smarting under the injustice meted out to them under the name of law, are disposed to hail with satisfaction a provision that would enable them to relieve themselves of the burdens and responsibilities of their trusts, and appoint an undeniably safe trustee in their places. Various efforts have been made from time to time to meet this want." Then I go into the various schemes which have been brought into the House at different times, having two objects: one set of schemes being for the appointment of an official trustee, and the other set being the authorising of public companies to undertake the office of trustees. And then I proceed in this way: "It appears to me that the cry for a public trustee is based upon some confusion of thought. Two requisites are essential in all trusts: (1.) Safety of trust funds. (2.) Discretion, and knowledge of family circumstances. The problem is how to reconcile these two essentials with the existence of a public

*Chairman*—continued.

trustee as proposed; and to my mind it is insoluble. If you want safety, what safer trustee can you have than the Court of Chancery? If you want friendly advice and management, based upon knowledge of family affairs and tinctured with ties of relationship, what worse trustee can you have than a public official, who must necessarily act upon strict rules and must be satisfied with evidence little short of what is required in an administration of trusts by the Court of Chancery? In fact, the administration by a public trustee must closely resemble the administration by the court, and will carry with it the delay, expense, and want of elasticity involved in such an administration. It is also difficult to see how the remuneration of trustees, generally, can be resisted when once the principle of payment is introduced, and I think it much to be deprecated that an office in which friends and relations are able to and do render assistance to each other in an unselfish way, should be degraded into an office of profit. If the duty of public trustee were limited to that of being a mere custodian of funds, having no discretion as to the dealings with them, and being bound to act in accordance with the direction of the trustees or beneficiaries if not inconsistent with the terms of the trust, I do not feel that any substantial objection could be made, and such a trustee would satisfy all the reasonable aspirations of those at whose instance the scheme is proposed. Such an official exists at present in the person of the official trustee of charities, whose sole duty is the guardianship of the funds, the management of the charities being left in the hands of the trustees."

586. That, I understand, represents the view that you still hold?—Yes.

587. What is the view that was taken by the Incorporated Law Society, so far as you are aware; did it concur with your opinion?—Yes, I think so; I am not sure that they all agreed to my last suggestion there about an official trustee whose sole duty should be the guardianship of the funds, he being a depository; they felt some difficulties about that, because it was felt that a trustee who was only a depository of funds is really no trustee at all, and if he is anything more than a depository of funds then he is an administrator.

588. But the general sense of the society, as I gather from you, was in favour of your suggestion as a whole?—That is so.

589. I rather gather from reading that address of yours that in the first instance there was not any objection felt to the idea of a public trustee, was that so?—I think the strong objections to that were not entertained at first; that was not till we came to look into it a little more to see how it would work.

590. I see you state that "There has been for some time past a wide-spread feeling in favour of some scheme for the establishment of a public, or *quasi* public functionary"?—Yes.

591. That is so, is it not?—That is so in various quarters.

592. What do you suppose that that is due to; do you think it is due to the fact that there have been no doubt, not relatively very great, but absolutely very large defalcations by various

*Chairman*—continued.

trustees all over the country?—I have no doubt that that has contributed to it; but I should like to go into that question of loss at your convenience.

593. Will you do so at once, please; what do you say about that?—I say that the losses are infinitesimal. According to a Return of the House of Commons in 1885, the total value of real and personal estate was estimated at between nine and ten thousand millions. Now of that it is supposed that about one-tenth is held in trust; that is supposed, it is a mere guess. A tenth of that would be nearly a thousand millions in trust, and the aggregate of losses from defaulting trustees is very small indeed compared with that. And, further, I should like to add that when you talk about losses by trustees, what is aimed at now is not losses by want of judgment, or the commission of breaches of trust, but losses by means of fraud. I hold, if I may say so, that breaches of trust are very desirable sometimes, and I have very frequently advised them under safeguards, and after duly explaining the whole matter to the trustees and the *cestui que* trusts.

594. You have high authority for that in Lord Justice Lindley, who would like to see judicious breaches of trust sanctioned in certain circumstances?—So I saw this morning.

595. The fact is, is it not, that sometimes trusts are so strictly and even unreasonably limited as to leave very little discretion to the trustee at all with regard to investments, and things of that kind?—Yes. A good deal has been done to cure that of late years in the Trustee Acts of 1888 and 1889, and the recent Consolidation Act.

596. In the first place, before I go to the main point, which is the point in relation to dishonest trustees, do you not think there is often a very great deal of injudicious investment owing to importunity on the part of *cestui que* trusts who wish to increase their income?—I quite think there is; but I do not come across it very largely, and my business is mainly trust business; it is only now and then that I come across such instances.

597. There is a great deal, very often, of importunity on the part of *cestui que* trusts, and a great deal of embarrassment to trustees by reason of the desire, especially in small trusts, to get a larger income?—Yes. I have suffered from that myself personally in a trust, so that I know that it exists, but not to any large extent, I think.

598. Do you not think that a good deal of trust money is lost by reason of such injudicious investments?—No, I have no reason to suppose that it is so.

599. Then you think that the main element of loss in the cases of defaulting trustees is from absolute dishonesty on the part of the trustee?—I am distinguishing between the two. I was saying that the general public do not distinguish between the two. They say that the loss is the fault of the trustee, and, therefore, it is a case for having a public functionary. I say no, you must distinguish. The losses may be owing to a breach of trust, which is a venial sin, or they may

*Chairman*—continued.

may be owing to dishonesty, which is unpardonable; and I say that the losses owing to dishonesty are but an infinitesimal portion of the aggregate trust funds of the country.

600. But I am speaking now not so much of the aggregate trust funds of the country as of the trust funds which are lost from one reason or another; and I think you have told me that you think there is not much that is lost by reason of unwise investment?—Not much, I think.

601. Then where it is lost do you think that, generally, it is lost from dishonesty?—No, I do not. I say that there is not much loss either way, but that the losses from injudicious investments are very much larger than those from fraud. I can give you some illustrations of that, if you will allow me.

602. If you please?—I act as solicitor for the Law Life Insurance Office, and have had some transactions taken out in order to state them to the Committee. Within the last 10 years I have acted in 440 transactions, and, more than that, about 450 transactions of loans on or the purchases of reversionary interests in trust funds. The sums invested amount to 570,000*l.*; they all depend upon the proper acting of trustees. In every case inquiries are made of the trustees as to the existence of the funds, and, when a transaction is completed, a notice is given to them; but everything depends upon the integrity of the trustees. I have never had a loss in all those transactions; and I think that in investigating those transactions and the numerous others which have been brought to me, but which have not been carried out, I have no recollection of finding that in any one the funds have been misappropriated by the trustee. Then I should like also to add that the same society holds not far from half a million of money invested in mortgages of life interests, and policies of insurance. Those mortgages mostly depend upon the integrity of trustees; and practically the point of view that the Law Life Insurance Company takes, and which I may adopt, is, that those securities are among the safest and most satisfactory securities that can be had.

603. I would like to understand the nature of those cases. In the first place, with regard to the mortgages on reversionary interest, those are cases in which the insurance company advances money upon the security of the reversionary interest, I suppose?—Yes; this is the most common case: a child in the lifetime of his parents wants to raise money for some purpose, perhaps to go into business; it is not convenient for the parents to find the money, or to reduce their income; he therefore comes to the insurance society, and says: "I am entitled to 3,000*l.* after the death of my father and mother; will you lend me a sum of money upon the security of that reversion?" Proper inquiries are made of the trustees, and if the funds are all right, if the trustees have had no notice of encumbrances, then the advance is made, and notice is given to the trustees, and the whole safety of the security depends, not only upon the funds being there, but upon the integrity of the trustees, and upon their not having behind our backs destroyed our notices, and admitted other notices of other encumbrances.



*Chairman*—continued.

604. In those cases, the funds, I suppose, may be stock or funds of different kinds, monetary funds, and not land?—In some cases land and in some money; the majority are cases of funds.

605. In those cases the stock would be standing in the name of the trustee?—Yes.

606. Do you distinguish in that insurance company between cases where the money is standing in the name of one trustee, or do you require that it should be in the name of more than one?—No, we do not decline to act where there is one trustee; but we protect ourselves in that as in other cases by putting on a distringas.

607. For the benefit of the Committee, who are not all lawyers, will you just explain what the nature of the security is?—A distringas is an affidavit made by me to say that the Law Life Insurance Society has an interest in so much stock, standing in the names, say at the Bank of England, of A. and B., and that the stock is not to be parted with without notice to the Law Life Insurance Society. I make that affidavit and hand into the bank a notice of claim, and the bank registers it in their books.

608. Which bank are you speaking of?—I am speaking, as an illustration, of stock in the Funds—the Bank of England.

609. In that case, what you do with this distringas is to prevent the trustees from alienating those funds without notice being given?—Yes.

610. Allow me to ask you one question about that: Is not the effect of that to make it impossible for trustees to commit a breach of trust?—No; it only puts me on notice. I was going on to explain the matter. I frequently have a notice from the Bank of England to say that an application has been made for a power of attorney to transfer the stock on which the distringas is. I immediately then go to the trustees, or their solicitors, and say, "What are you going to do with my funds?" The answer generally is, "I am going to appoint new trustees," or "I am going to sell out the portion of the funds that belongs to one of the other beneficiaries." Finding that it is not intended to touch our portion of the funds, I let the transfer take place without stopping it, and then immediately replace my distringas. In the interval between the running off of the distringas and replacing of it, the trustee may do what he pleases with the funds.

611. But that is a very short period; and if you have any misgiving you can immediately check it; you are on the spot, so to speak, are you not, with your legal power of checking the whole transaction, and unless you are satisfied you do not let it through?—No, I have no power. Till that reversion falls into possession I have no power; I have only got by means of the distringas the right of being warned that somebody is tampering with the funds.

612. But supposing that somebody wished to deal with them, and you were satisfied that it was for a dishonest purpose, the Courts of Law would assist you, would they not?—I should put myself in communication with the beneficiaries. I have

*Chairman*—continued.

no *locus standi* unless the fund is in peril of being absorbed.

613. Pray do not imagine that I want to magnify the misconduct of trustees; I only want to appreciate how the matter really stands. Am I not right in thinking that for all practical purposes you have the whip hand, because you can go to the beneficiaries, or you can apply to the court?—Practically, I think I am fairly safe; but I cannot stop every hole.

614. Of course not; at the same time, under those circumstances you do not rely unaided and solely upon the honesty of the trustees, but you have some legal faculties upon which you can fall back; is not that so?—In the case of a sole trustee none of these precautions will protect me against his walking away with the funds; and there is where fraud comes in; in the case of a sole trustee. If the *cestui que* trusts are so careless of the funds as to allow them to remain in the name of the sole trustee they are apt to lose them; they must attend to their trust business as they do their own business.

615. I do not want to pursue that further, but it seems to me that when you have a sole trustee the distringas enables you for all practical purposes to check him, because he cannot alienate those funds without your having previous notice of the intention to alienate?—But I am a stranger to the trust, and it is easy to put before me a plausible pretext for dealing with the fund. The appointment of a new trustee is the most plausible.

616. You mean that you may be imposed upon?—I may be imposed upon.

617. I should suspect that to be very difficult?—It is very good of you to say so.

618. The beneficiaries would have the same power of putting on a distringas as the mortgagee, would they not?—Yes, they would.

619. Mr. Kimber suggests to me that I should ask, and I will ask, about other funds than those registered at the Bank of England; will you give an illustration of another class of funds?—London and North Western Railway Stock.

620. What do you do in that case?—I put on a similar distringas, that is, a notice to the registrar not to allow any dealing with the capital of the fund (income I do not touch) without notice to me.

621. I need not say that if the registrar deals with those funds, or permits dealing with those funds, after receiving the notice and in defiance of the notice, he is liable?—I take it that he is liable; I have never had occasion to press it home, because they never do such things.

622. I now come to cases of mortgages which you referred to, upon a life interest and policies of insurance; I presume in the case of a mortgage on a policy of insurance you serve notice upon the insurance company?—Yes.

623. And in cases of mortgages on life interests what do you do?—I serve notice upon the trustees of the fund; and that is precisely the same as a mortgage upon the *corpus*.

624. Do you not think that you are tolerably safe in those transactions also?—I think so, or else I think my good clients of the Law Life Insurance Society would not entertain them, they are all lawyers.

*Chairman*—continued.

625. And in a certain sense, no doubt, you exercise your own judgment and experience in selecting which of those securities you would take?—Yes; we should hesitate about a security in the case of a trusteee who was known to be of doubtful reputation.

626. I will now come back, if you please, to the figures which you gave us on the point on which I was starting. You do not think, as I understand, that the amount of losses due to dishonesty of trustees is a considerable amount?—No, I think not.

627. I am not now speaking relatively, because we have heard something of about 1,000,000,000*l.* being held in trust, which is a very large figure; but a great deal of injury may be done by dishonest dealing with even a small fraction of that trust property, may it not?—Strictly speaking, I ought to speak only with regard to my own personal experience; and with more than 40 years' experience in my office, dealing largely with trusts, acting for trustees I suppose holding, it is difficult to estimate how much, but say millions of money, I have had no personal experience in my own office of any loss by dishonesty of trustees. It is exceptional experience, perhaps, but at any rate that is my experience.

628. We see such cases in the Courts of Justice from time to time, as you are aware?—You gather up from the whole of the country the few cases that there are. Looked at absolutely they may be large; relatively they are infinitesimal.

629. That is really the point that I was rather leading to; but you put it better. Absolutely they surely are very large, are they not?—Yes, certainly.

630. Not relatively a large sum, but absolutely? I daresay they are.

631. Very large sums every year are lost, are they not, by dishonesty of trustees?—No, I would not go so far as that. If you go back 10 years you may say that a large sum has been lost by fraud of trustees; but per annum I do not think there is any great magnitude in the losses.

632. I suppose there is no means of getting statistics for ascertaining the loss?—Not that I am aware of.

633. Do you not think that it very often happens in small trusts, where the money is most missed perhaps, that there is considerable loss by reason of dishonesty?—I think those are the cases where the losses take place, small trusts with perhaps a sole trustee, where they will not go to the expense of appointing another trustee, the *cestui que* trust urging investment at a higher rate of interest, and the trustee, uncontrolled by anybody else, perhaps easy-going to begin with, ultimately succumbing to the temptations put in his way.

634. You are now mixing up the two cases of injudicious investments or breaches of trust, and of actual dishonesty?—I am rather showing how they glide one into another sometimes.

635. We have had it given in evidence by witnesses already that there is a very considerable loss of money in this way, and that that which comes to light by no means represents all that

*Chairman*—continued.

that is believed to take place; would you differ from that?—That may be so. I have very little practical experience as to that, but I think that that general statement includes losses by error in judgment as well as losses by fraud. I think there is no clear distinction in the public mind between the two.

636. Now I ought to ask you in that connection a question or two in reference to solicitors. I think I may ask with confidence, as I used to be counsel at one time for the Incorporated Law Society, whether it is not the case that they are very strict indeed in dealing with cases of breach of trust?—Yes, they are.

637. I mean dishonesty of trustees?—Yes, I am a member of the Discipline Committee, before whom all these cases come.

638. It is the case, is it not (they have been for years, I may no doubt assume that they have been so always), that they are and have been for many years extremely strict in collecting and bringing to punishment any cases of dishonesty on the part of solicitors?—That is so.

639. Of course there are a very large body of solicitors in the country, and there must be black sheep in every flock; can you tell us whether there have been many cases brought to your knowledge of dishonesty on the part of trustees?—I can only speak of the cases that are brought before our Discipline Committee. I think my colleague, Mr. Hunter, who is coming here presently, was chairman of that for some time, and he will probably have the statistics; but I should say that so far as my own knowledge goes we have not had a dozen cases since the committee was formed, which was under the Act of 1888, not a dozen cases of fraud by solicitor trustees.

640. That have been brought to your notice?—That have been brought to our notice; and almost all those cases do come to us; it is the first thing that the beneficiaries think of.

641. I will ask Mr. Hunter then about that, as you have referred me to him; he will be able to give me statistics of the number, no doubt?—I think he will be able to give you some statistics about that.

642. I observe in your presidential address that among the reasons that you assign for a wide-spread feeling in favour of a public trustee being appointed, you refer to the "absolute security for the trust funds" being desirable; that would be undoubtedly secured by a public trustee, would it not?—Yes.

643. And "to avoid the recurrent expense and trouble of appointing new trustees"?—Yes.

644. The trouble, of course, is a nuisance, so to speak; but the expense would be, in quite small trusts, relatively a considerable sum, would it not?—It may be; of course it varies very much. The last illustration that I can give you, perhaps, is a letter I received this morning thanking me for completing the appointment of new trustees of a settlement where the funds consisted of 5,000*l.* and upwards, and sending me a cheque for my account, which came to 8*l.* 7*s.* That is the very last illustration that I can give you.

645. That was indeed a very trifling incident,



*Chairman*—continued.

but in other cases it may be more expensive?—Yes.

646. And relatively more expensive?—The smaller the fund the larger the expense is relatively; that goes without saying.

647. I observe that you also refer (I am taking what you said passage by passage in order to ask you to explain it) to the injustice meted out to trustees under the name of law. I presume that you refer to the extremely strict rules made by courts in judge-made law in regard to the liability of trustees?—Yes.

648. We have had it suggested there that there might be some relaxation in that severity; what do you say about that?—I quite think that. I think that if you put greater facilities in the way of trustees for getting the directions of a judge or chief clerk at Chambers, you would improve their position very much.

649. They have power under the Trustee Act, but then that is a sort of little litigation?—Yes; it is a little litigation and you must file affidavits. It is a suit in miniature.

650. Would you be disposed to relax the general principle of the law or to enable the Court more readily to grant a license, so to speak, to trustees?—I should like to do both; I should like a trustee to be treated, as he nominally is, as if he were or ought to be a prudent man of business; whereas, as a fact, a trustee is looked upon as an expert more or less, and that which a man may consider prudent in one class of business is not, perhaps, prudent in another. He must be treated as if he were a sort of expert. I do not know that I explain myself very well. What I mean is this: a trustee when he takes upon himself investments must be treated as an expert in finance. That, I take it, is the line which the courts take. It does not suffice for him to say, "I have been prudent and discreet, but I have got no special knowledge of finance, and therefore I have made a mistake." "No," the Court says, "You have undertaken to be a trustee in the matter of finance, and must be treated as an expert, and if you have not been prudent as an expert you must suffer."

Mr. *Kimber.*

651. Even judged by the light of after-events?—Yes, even judged by the light of after-events; the difficulty comes afterwards always. The trustee is often urged to do something to benefit the *cestui que* trust and increase the income, who is grateful for it at the time; but when the losses come, then the trustee is blamed for not being wiser than he was.

*Chairman.*

652. Do you think it would be safe to so change the law that a trustee should not be responsible if he had acted as a reasonably prudent man?—I think so.

653. Would that be a great relaxation?—I think not. Then I would adopt your other suggestion; that the Court itself should be at liberty to do a little wrong to make a great right.

654. To authorise judicious breaches of trust?—Yes.

655. And, would you add, to give direc-

*Chairman*—continued.

tions which should absolutely safeguard the trustee on his application, by an inexpensive and informal process?—I would; I would have that given on a statement of facts by the trustee, without affidavit. The trustee then could only avail himself of the sanction of the Court by showing that his statement of facts was correct.

656. It comes to this, does it not, really, so far as applications to the Court are concerned, that you think it is a very valuable thing to be able to take the directions of the judge, but that the process is rather too cumbrous and rather too expensive, even now?—That is so.

657. You would allow easier access to the judicial mind?—Yes.

658. If that was done, would not that be sufficient without relaxing the rule?—I think very likely it would go a long way towards the object. You are going to ask me, I suppose, about the difficulty of getting trustees; this rather leads to that.

659. I will, if you please, ask you now; what do you say about that; is it difficult to get trustees now?—Sometimes, in some cases, but I have really always been able to get over those difficulties in one way or another. As a rule there is no difficulty, but every now and then there are difficult cases.

660. There is always some member of the family ready to sacrifice himself?—Yes.

661. But I suppose you yourself, like all the rest of us who are supposed to be familiar with legal affairs, have been besieged repeatedly to act as trustee by your relations and friends?—Yes, I am trustee for all my relations and some of my clients too; but I put a check upon that.

662. Then really, I speak feelingly upon this subject, does it not come rather hard upon anybody who happens to know anything about law, that he should be the universal trustee of the community for Heaven knows what; do you not think he is liable to rebel against that state of things?—I bear it with equanimity; I would rather not have it, but one must do something for one's relations to help them in some way.

663. Do you not think, however, that there is a difficulty practically, especially for poor people, and those who have not got professional relatives?—That is where the difficulty arises; in the small cases it is difficult to get new trustees very often.

664. This is largely a question, is it not, of small cases?—Yes, it is, I think.

665. In the great estates, where there is a large income, and opulent relatives, and everything is on that scale, it is not so difficult perhaps to get trustees; nor is the expense of so much importance?—No.

666. But in comparatively small cases, where people who have been thrifty want to lay by a little money for their family, and make small settlements on their wives and children, it does come very hard upon them, does it not?—There is very often difficulty in appointing new trustees. You can generally get the trustees to start with, but when it comes to filling up places with people in a poor position it is not easy, sometimes.

667. In asking you about trusts, I have spoken generally about trusts; but there are a very great variety of trusts, as we all know. In the first place there are those trusts which always arise when there is a will or an intestacy?—There is hardly a trust when there is an intestacy.

668. The administrator, I presume, might be regarded as a trustee?—Yes.

669. But all the property that passes on death, or nearly all of it, has for some time to be under a trust of some sort?—Yes, it has to be dealt with by executors or administrators.

670. Do you think that for purposes of mere distribution, the getting in and distributing of an estate, there would be any objection to having a public trustee appointed for such a purpose?—Yes, because I think a public trustee must act more or less like a Chancery judge. He knows nothing of the parties; he cannot take anything from his own knowledge or information, he must have evidence of the state of the family, and of the circumstances under which he is to act. He cannot act of his own knowledge; he has no knowledge.

671. Does not that rather apply to cases of discretionary trusts more than to cases where the will, I will say, lays down what is to be done with the property?—I am taking the simple case that you put of a will or intestacy. Take the case of intestacy. There are various members of the family, children, grandchildren or cousins, some in England and some in the Colonies. An ordinary executor or administrator would know all about the family, and would act upon that knowledge. The public official is a perfect stranger, and he must be approached in the same way as the judge of the High Court of Chancery, with evidence.

672. I am taking the case that you put now, of a will where there are children and grandchildren, some in the Colonies and abroad, and so forth. Supposing in a case of that kind the public trustee were associated with a member of the family, as a trustee, would not you remove all inconvenience if you allowed the public trustee to act upon reasonable evidence?—Yes, if he will do what the other trustees tell him; but the difficulty of putting the public trustee in is that he will not budge an inch without evidence, he cannot.

673. There is a letter that I received this morning, which has not been printed yet, from Lord Justice Lindley, and, if you will allow me, I will read it and see what you say about it: "Some of the objections which I pointed out might be met by a clause to the following effect: The official trustee may receive as evidence and act upon any information which he thinks reasonably sufficient." Supposing that were done, do not you think that the association of the public trustee with the members of the family would be open to no objection?—It would be open to less objection, but still you have got the funds in his hands, and, when he is called upon to part with them he may not act upon that evidence. That is only an option given him; and my experience of officials is that they will not go out of the way to incur any responsibility. Who is to be responsible if the funds are lost in consequence? There is the difficulty.

674. Will

*Chairman*—continued.

674. Will you illustrate the kind of difficulty to which you refer, in a concrete case, taking the illustration which you have already given, and applying a further one?—Let us say that the official trustee is associated with A. and B. as trustees of a marriage settlement, and that there are children of the marriage.

675. You mean after a death; I was speaking of a will?—As trustees of a will. They have a trust to pay the income to the widow for life, and, after her death, to divide the fund among the children. One of the children wants a sum of money to go abroad with, for his outfit, or professes to want it, and he makes a statement to that effect. There is a power of advancement in the will; the co-trustees go to the official trustee and say, "Look here, one of these children wants 500*l.* for his outfit in going out to the colonies." The official trustee takes the statement; money is sold out and given to the child, who walks away with it, and never applies it to the purpose for which it was granted. That money is stolen from the trust, and the official trustee with the other trustees would be liable to make it good.

676. But now in the case that you have given us, the public trustee is acting upon the representation of the other trustees?—Then he may have contribution, perhaps, from them.

677. But supposing that there had been no official trustee, is it not reasonable to suppose that the private trustees in that case would have done the very same thing as they had recommended to be done?—But supposing that the private trustees are in collusion with the child to get the money out, the official trustee cannot see to the administration of the fund.

Mr. *Kimber.*

678. The family may conspire?—The family may conspire.

*Chairman.*

679. I will tell you how that strikes me, and then ask your criticism; if that is the case of the family trustees conspiring with one of the children in order to plunder the fund, in effect is it not reasonable to suppose that if no public trustee were introduced the conspiracy would go still further, and only end at the entire dissipation of the whole fund?—That may be.

680. In the given case all that would be lost would be the 500*l.*, and the rest would be saved, would it not?—It may or may not be.

681. That is the way it strikes me; but, of course, I may be wrong; I suppose you would think that if there was a public trustee he ought to have very free access to the judge in order that he might take directions, and even ask advice from the judge?—Yes, certainly.

682. Do you think that the public trustee should be an officer of the court?—I think if you are to have a public trustee he should be put under the judge.

683. I see you point out in your address the two requisites of all trusts; the first is the safety of trust funds; and the second is discretion and knowledge of family circumstances; do you think that really in very many simple permanent trusts, as, for example, a trust under a marriage settlement to hold property for the benefit of the widow for life, and afterwards for distribution in given proportions among the children, there is very much discretion or knowledge of family circumstances required?—Yes, constantly with regard to the children.

*Chairman*—continued.

684. You mean in cases of advancement?—Yes; in cases of advancement and maintenance.

685. But do not you think that when the mother is alive and the family trustees are acting together with the public trustee, in the vast majority of cases the public trustee would be able to act, in small matters like that, comparatively small matters, upon the representation of the family trustee and the mother?—I think he might; but then you cannot tell what this public trustee will do; he will be an official and he will act as an official; officials will not take responsibility.

686. He would have one great advantage, surely, that the trust funds would be absolutely safe; that is a great thing gained, is it not?—Yes, no doubt.

687. When you speak of knowledge of family circumstances, does not that represent the possibility of error in an extremely small portion of trust funds after all?—It is only conjecture to say how much.

688. It is always a comparatively small portion when dealing with advancements for children; because, if one child had a sum advanced for present purposes and it were to be wrongly applied the public trustee would be extremely chary, would he not?—But you see it is only an illustration; another great question is investment of funds. I should expect that the official trustee would not hear of anything but the Government funds.

689. Surely he would be at liberty to consider more things than that, if the will allowed it, in terms, on the settlement?—And the law allows him to do so now; but take, for instance, a mortgage. Will the official trustee investigate it himself, or will he be satisfied with the investigation of it by the co-trustees?

690. You mean an advance upon mortgage of leasehold property?—Yes; I take it you will find that the official trustee will not incur any responsibility, and he will have the funds invested in Government funds where they are safe; he will not go into mortgages because there is the responsibility of getting the property valued and getting the title investigated and having the mortgage properly drawn.

691. Yes, in cases of mortgage it may be so; but take the ordinary investments that are allowed by the Court, not mortgages, which may be precarious, as mortgages often are, especially on leaseholds, I suppose; but take the ordinary investments allowed by the Court, and allowed by Statute, if I recollect right, are they not?—Yes.

692. There is a considerable choice of securities, is there not?—Yes.

693. And he would be at liberty to invest the money in all of those securities?—Yes.

694. Without any danger at all?—Yes. But that does not meet what I was suggesting. Those securities do not produce the interest that

*Chairman*—continued.

mortgages do, and the great pressure of *cestui que* trusts is for mortgages.

695. But mortgages are not, of course, always so safe?—They are not so safe as the 2¾ per cent. Consols.

696. Is not really one of the great objects in having a public trustee to prevent money from being invested in careless securities?—No; the Act of Parliament has authorised mortgages expressly.

697. Mortgages of a limited kind, I think?—No, mortgages of real estate, and I think leasehold too; I am not sure; I daresay Mr. Warmington will tell me.

698. They must be for a certain number of years, I understand?—Yes; those are expressly authorised. And the cry of *cestui que* trusts is, I always find, for mortgages. I cannot find them.

Mr. *Kimber.*

699. Long leaseholds are also included?—Yes.

*Chairman.*

700. If it were to come to a public trustee I should have thought he would have been able to exercise a fairly sound judgment, would he not, in regard to mortgages; he would be a man of very great experience after a short time?—But he will have so much experience that he will not do it. He cannot do the work. If you have got a thousand millions of trust property, and the institution is successful, you will have all that thrown into the hands of this one man.

701. A thousand millions is a very large sum, of course; but if you had a hundred millions would you not contemplate that there would be a great extension of this system; that is to say, that a very considerable number of officials would have to be appointed for the purpose?—I think you would have to appoint officials all over the country. Liverpool and Birmingham men will not come up to London for a public trustee.

702. I see you refer to a matter that I have a communication upon, which I am going to refer to, in your address to the Law Society, namely, the Official Trustee of Charities; would you kindly tell us how that trustee acts, and what his position and experience is, so far as you know?—The funds are invested in his name; the income is remitted to the trustees, and they manage it entirely, and administer it entirely. You cannot touch the capital without the sanction of the Charity Trustees. That is the short result of it; and I should have no objection to that; it is putting the money safely on a shelf where it cannot be touched. But then there is absolute safety, because the trustees deal only with the income. But you have a difficulty in trusts, because you are always wanting to deal with the capital, more or less.

703. You mean in an ordinary trust?—Yes, an ordinary trust. In public charities it is not so; the money will go into the funds and remain there half a century; but with private trusts you are always wanting to do something, change investments or make advances to children, and various things may be suggested, and you have got to get the money out of the hands of the trustee. If he allows the money to go out of his hands, the safety is gone; if he is to look after the destination of the money, then his position as a mere holder of the money is gone too; he becomes an administrator, because he will say, "I will not part with the money without strict evidence that what you propose to do is within the four corners of your trust deed."

*Chairman*—continued.

704. I observe the distinction that you draw in the case of a trustee and the official trustee of charities; that charities are in themselves a permanent investment of capital in particular funds, and are constant; they do not require, as you say, to be distributed; but there is this feature, is there not, about them, that the security is obtained by putting the money in the hands of the official trustee, and a discretion is left free by leaving the distribution of the income in the hands of the local trustees of the charities?—That is so.

705. And it works very well?—It works very well; I have had personal experience of it.

706. And you find it answer very well?—Yes.

707. Do you know that there is about 17 millions sterling in the hands of the official trustee of charities; I am told that is the sum?—I daresay there is; I do not know that.

708. I gather that you do feel that if that practice could be applied to the case of private trusts, there would be no objection to it at all?—Yes, I only put it in that way; I do not advocate it, because I do not see the need; but if it could be applied to private trusts I do not see any objection. The difficulty I pointed out of dealing with capital you have got to get over.

709. Does not that rather resolve itself into a question of the character of the evidence upon which the public trustee is required to act?—Very much.

710. There is a great deal of formality, I am afraid, in dealing with moneys in court, and always has been, as you know?—Yes.

711. I am not so familiar as you are, no doubt, with the subject, but I have always understood that that was so; do you not think that some of that might be dispensed with with advantage?—I always think that we could dispense with a good deal of red tape in all our dealings.

712. There is a good deal of red tape?—Yes, but it has very much improved in late years.

713. Supposing that there was a strong general wish, which I understand you to say there is, in favour of some scheme, you would not object to it if it limited the public trustee to being a mere custodian?—No.

714. You would not allow him in any degree to exercise any discretion?—I think if that system were adopted he must be bound to deal with the fund as directed by the trustees, unless upon the face of it it is inconsistent with the trust deed.

715. Would you not allow him, when he thought it was inadvisable and imprudent to act in a particular way, to take the opinion of the judge, and the direction of the judge?—No, that is administration; that is not safeguarding funds.

716. Would you preclude him altogether from every kind of administration?—I should certainly. I think

*Chairman*—continued.

I think it would only create difficulty and expense.

717. I suppose that that is the thing in regard to which experience might lead to more light; I mean that the official trustee might turn out not to be so formidable a being when he had been seen at work?—But we have had some experience about officialism in the case of the Land Transfer Act and the official receiver. We have had a great deal of experience; we know what officials are.

718. As regards the Land Transfer Act, there were defects, were there not, in the system of land transfer?—Yes; but they were a great deal removed by Lord Cairns' Act of 1875.

719. However, I will not pursue that?—The great defect of that is that people will not have it, and you are going to make them have it.

Mr. *Warmington.*

720. With regard to the widespread feeling to which you have referred in favour of the establishment of a public trustee, may I ask you whether that widespread feeling has been noticed by you in the profession or in the public generally?—In the public generally. I referred to what was said in the House of Commons.

Colonel *Howard Vincent.*

721. Do you say that there is a widespread feeling?—No; I took it from what was said in the House of Commons, that there appeared to be a general feeling, but not in the profession.

Mr. *Warmington.*

722. What I wanted to clear up was this: do you take that widespread feeling as evidenced by what occurred in the House of Commons, or is it the result of your own observation?—Certainly not my observation; only from what was said in the House of Commons.

723. Now, as to your own business; I presume your business in trust matters mainly concerns trusts of considerable extent, large estates?—Yes, that is so.

724. In large estates is it not your experience that the trustees have the benefit of professional advice?—Yes.

725. Which, of course, is a great protection?—That is so, no doubt.

726. And you have acted, I suppose, for beneficiaries, and for beneficiaries against trustees?—Yes.

727. In those cases is it the custom of the profession to advise the beneficiaries, say a child entitled in remainder, to put a distringas upon the trust funds?—It is done sometimes; I cannot say it is usual.

728. Very rarely?—It is rarely done.

729. Take your own business; do you often advise it?—I do not; but I could mention one firm of solicitors in large practice who always do advise it.

730. But is it not a standing rule of many reversionary interest societies, and also insurance companies lending on reversionary interests, that there should be a distringas on the funds?—Yes, almost invariably.

Mr. *Warmington*—continued.

731. And the object of that is to secure the fund?—Yes.

732. And I think the societies have obtained now a simplification of the process?—Yes.

733. As to an amendment of the law, do you think it would be advisable to allow the courts to alter the terms of the trust as expressed in the will or settlement?—I a little hesitate to go so far as that; but I should like to enable them to put a very benevolent interpretation on them.

734. Let me put it in this way: I suppose you would go to this extent; that they might amplify the power of investment?—Yes, I see no objection to that. The Court of Chancery, you see, as a court, by rule, has the power of doing that now; and I should be quite prepared to extend that to a particular judge in a particular case.

735. And you would give the court the power, before the proposed departure was made, to authorise it?—Yes.

736. Would you also allow the court to have the power to sanction it after it had been made, so as to relieve the trustee from liability?—Yes.

737. You would give it the power in both cases?—Yes, in both cases, I think.

738. But, again (I know you are familiar with the course of legislation in these matters), would you allow that in cases where the settlor or testator had prohibited such relaxation?—No; I think you ought to follow the directions then.

739. And can you mention any other particular in which you would employ this dispensing power; I can see it with regard to investments; would you apply it, for instance, in the power of advancement; supposing that the testator says that the trustees may advance up to one-third, would you say that there should be power in the court to relax that and say, "Under the special circumstances we think you may advance up to one-half"?—Yes; provided it is not done to the prejudice of the tenant for life, without his or her consent.

Mr. *Kimber.*

740. Unless by consent?—Yes.

Mr. *Warmington.*

741. But an investment does, as a rule (it may, certainly), alter the rights of the parties, because the advancement is frequently exercised in favour of a person who may ultimately not become entitled to any part of the fund?—Yes, that is so.

742. One question about the advancement: if you have a particular case I should like to hear it, but have you not put the case a little too strongly against the trustees; a man comes and says, "I am a beneficiary and I want an advancement;" is it the law that the trustee would be liable if he, *bonâ fide*, gave to the beneficiary the money for the purpose expressed in the will?—It may depend somewhat upon circumstances.

743. I agree; the prudent course is, no doubt, if an advancement be made, for the trustee himself to purchase the outfit, or to buy the business, and so on?—Yes.

744. Would not the public trustee be able to make the cheque payable to a shipping firm, or the vendors of the business, for example?—Yes.

Mr. *Warmington*—continued.

745. Do I rightly understand you to say that in all your experience you have not come across a loss of trust funds from the dishonesty of trustees?—I can think of no case within my own actual experience. I have heard of cases, of course.

746. I should think the experience is pretty well unique?—It may be a lapse of memory; but as I came down here this morning I was trying to think of a case, and I could not.

747. With regard to the business of the Law Life Insurance Society, are there many cases in which the business has been refused because from your inquiries the trustees who hold the funds have a questionable character?—Very few.

748. If it is known that in times past the trustees have been guilty of breaches of trust, I suppose then you would advise the Law Life Insurance Society to pass the business over?—No, I do not think that follows, because we should see that the funds on which we are lending are right now, and we should take care, by means of the distringas, that they should not go wrong.

749. You rely upon the distringas?—Yes, we rely upon the distringas to a great extent.

750. Would there be any difficulty in allowing a public trustee to employ a solicitor, just in the same way as a private trustee does; and to act upon his advice, for instance, in investment in land or mortgage; why could he not do that?—He could do that; but I doubt if the official trustee would quite relish being compelled to take any solicitor that the *cestui que* trust named.

751. Could it not be made part of the rules of the office that he should?—Yes, it could, no doubt.

752. There is another point which I should like to mention to you. It has been stated to us that part of the difficulty experienced in finding a trustee would be surmounted if trustees were allowed remuneration. Do you think that that would be so?—I think it would.

753. Do you think that that would be a prudent amendment of the law?—I do not like it myself, as I have said in my address; but it would be a way of diminishing the difficulty.

754. And of increasing the risk of defaulters?—Yes, and of increasing the risk of defaulters, perhaps. What I fear is this; that it is only in the small cases that there is much difficulty, and it is just those cases that would not be able to afford to pay a trustee.

755. And a public trustee is bad enough, but a gentlemen whom we might describe as a professional trustee would be worse still?—Worse still, I think.

Dr. *Farquharson.*

756. Would your objection to the appointment of a public trustee be lessened by the fact that the proposal is to make him an optional official; that is to say, that the application for his intervention is purely optional?—My experience of an office of that kind is that it is begun in a voluntary way; a large staff is created and a large establishment built, perhaps. Work does not come in; it is then necessary to provide

Dr. *Farquharson*—continued.

some occupation for the army of officials that has been created. The public does not appreciate it, and, therefore, an Act of Parliament is introduced for the purpose of making what was once voluntary now compulsory.

757. Then your objections are rather based upon what may happen in future?—They are based upon what we know has happened in the past, and what in all probability is likely to happen in the future.

758. You think that it may be the thin end of the wedge towards getting a stronger and more widely-reaching power?—It is in the nature of things that it must be.

759. But I think you admit that there is difficulty in getting private people to act as trustees?—In small cases with small trust funds; but those are just the cases which the official trustee will probably decline to take up.

760. We have had evidence from the Lord Chancellor, and from the late Lord Chancellor, that in their opinion the difficulty in getting people to act as trustees will probably increase very much in the future; do you share in that opinion?—I think not. I think a good deal has been done to facilitate the action of trustees. The Trustee Acts of 1888 and 1889, and the recent Consolidation Act, have done a great deal to ease the position of trustees.

761. Do you think that private trustees, as a rule, who are not lawyers know the dangers and difficulties, and appreciate the responsibilities, of their position fully; do you think that when those responsibilities become better known their disinclination will become increased?—I think they are pretty well known. Everyone knows, every trustee I come in contact with knows, that he is responsible, and he looks to the solicitor to see him safe.

762. I am not a lawyer, but I am bound to say that my appreciation of the responsibilities of trustees has been very much widened by what I have heard in this room. I was under the impression before that a trustee would be held not responsible if he had taken the precautions of a reasonable prudent man. I hear that that is not so?—That is the law, but not the practice, I am afraid.

763. Then, if the public trustee were merely the custodian he would not protect the private trustee in any great degree; because the private trustee, who would still have to be employed, I presume, would still be held responsible for breaches of judgment in the matter of investment?—Yes, I suppose he would.

*Chairman.*

764. If he went outside the trust?—Yes.

765. That is the origin of the whole thing, is it not?—Yes.

Dr. *Farquharson.*

766. That is to say, if he does what you have recommended should be done in many cases, namely, commit a judicious breach of trust?—Yes; I suggest that that should be done under authority, but I have often done it without.

767. What amount of liability would the official trustee have in respect to investments?—That

Dr. *Farquharson*—continued.

That entirely depends upon the constitution of the office; if he is a trustee, like any other trustee, he is equally liable for any loss which may arise by an injudicious investment, an improper investment say, unless there were something in the constitution of his office to free him from liability.

768. It has been suggested, I think, that the consolidated fund should be at his back to protect him?—Yes; but then some insurance fee would have to be paid for that, something to recoup the losses.

769. Suppose those judicious breaches of trust, which you have spoken of, do not come off, they would render you liable before the law, would they not?—Liable civilly, not criminally.

770. Would you be held responsible?—The trustee would.

771. That is a very dangerous line of procedure, I suppose?—Yes.

772. I think you said that you would prefer to make the official trustee, if he is appointed, an officer of the court?—Yes.

773. Would you prefer that to making him an officer of the Government in connection with a public department?—Yes; because his office would be intimately connected with the Chancery business.

774. For what reason would you make him so?—Because the Court of Chancery is the tribunal for all matters connected with the administration of trusts; whereas the public offices, the offices of State, know nothing whatever about such matters.

*Chairman.*

775. Chief clerks now do a great deal of the work, do they not?—Yes.

776. In the Chancery Division is it not the case that the judges, as well as being judicial personages, are to a considerable extent administrators, though their chief clerks, of large sums of money?—Very largely.

Dr. *Farquharson.*

777. I think you suggested that it would be a good plan that trustees should be brought into more immediate contact with the courts and with the law?—Yes; I suggested that access to the judge should be facilitated; practically that is the short suggestion.

Mr. *Kimber.*

778. By private trustees, do you mean?—Yes.

Dr. *Farquharson.*

779. But would the appointment of a public trustee not be a more convenient and cheap way perhaps of getting this same protection on both sides?—No; because the official trustee will not take any responsibility; he will have to go to the court. You cannot make an official trustee without paying fees; a private trustee you can. It is the addition to the expense; and the question is whether the risk of loss is really worth the additional expense in every case.

Mr. *Kimber.*

780. You have alluded to and admitted the existence of a widespread feeling in favour of some panacea; but I take the general effect of your evidence to be that that is a sort of craving for a perfect security and immunity, which, like many things which we crave for, is not exactly feasible without paying for it?—Exactly; it is an ideal trustee which will cost nothing.

781. Therefore, while you admit the existence of a widespread feeling, you do not admit, if I understand you rightly, the reasonableness of it?—No, not at all.

782. Or the power to satisfy it, except on being paid in some way?—No.

783. Now as regards the duties of trustees; the first and most important is, undoubtedly, the custody of the capital?—Yes.

784. But as regards the duty of a trustee, the extent of the duty, the amount of time and consideration that he would have to give to that, may I take it that is a very small portion of his duties?—If you mean the custody of the money, yes it is the smallest portion of all.

785. The other duties consist nearly, almost entirely, of discretions?—Yes.

786. The only other duty probably is the distribution of the income and the distribution of the capital when the proper time arrives?—Yes.

787. But with those exceptions the whole of the other duties of trustees are discretionary?—Yes.

788. And they require frequently knowledge of the family to whom the trust fund belongs?—Yes.

789. May I categorise those discretions as follows, and, perhaps, you will kindly correct me, or add to them if I am short; powers in the case of land, of leasing, sale, and exchange?—Yes.

790. Of granting of mining leases in cases of mines?—Yes.

791. Of apportioning the amount of those royalties attributable to capital from the amount attributable to income?—Yes.

792. And the next would be power as regards land, of farming (if it is agricultural land) if it fell into hand?—Yes, in certain cases. You must distinguish between cases where the estates are settled to uses, and cases where estates are vested in trustees upon trust. Your question refers to the latter, I presume.

793. Yes.—Then I quite agree with that.

794. Of course if they are conveyed to uses the tenant for life is *dominus* now?—Yes, the tenant for life has the responsibility.

795. But then there would be the power and consequent discretion of raising money for improvements?—Yes.

796. Under various Acts of Parliament?—Yes.

797. Then, with the increase of our mercantile business in this country, and the manufacturing business, there would be power to continue, or not, and a consequent discretion, the carrying on of that business?—Yes.

798. And the superintendence of it while it is carried on?—Yes, that frequently arises on an executorship.

Mr. *Kimber*—continued.

799. Then there are the discretionary powers as to investments?—Yes.

800. The power to make settlements on children which is frequently given by will to trustees to do?—Not quite to make settlements, but to provide funds for settlements.

801. And power in the will as regards daughters, to settle a share upon the child on her marriage?—Yes; I agree.

802. There a discretion exists?—Yes.

803. Not only as regards the provisions of that settlement, especially the provision for future husbands, but also in the appointment of trustees?—Yes; I quite concur.

804. Then there is the power of advancement?—Yes.

805. Usually extending to one-half of the capital?—Yes.

806. And, under the discretion which the court gives in poor cases, sometimes to the whole of the fund?—Yes.

807. Then there is in some cases discretionary power to consent to a marriage?—Yes.

808. Then there is also the power to expend not only income, but capital, in maintenance?—Yes.

809. And in the present state of the law as regards maintenance trustees would be indemnified by the court, in a poor case, for instance, where there was a necessity for the existence of a *cestui que* trust, in allowing even the principal to be applied towards the necessary maintenance of children?—I think they would.

810. Then in some cases there is a discretionary power to lend the fund to members of the family?—Yes.

811. And to take securities for it?—Yes, I have very often seen that.

812. And there may be probably other cases which in your experience you would think of; but those are all discretions which would have to be exercised by the trustee?—Yes.

813. And in this case by the official trustee, if appointed?—Yes.

814. In which, as the judges who have given evidence have told us, the official trustee not knowing the circumstances of the family of his own knowledge, nor even the legitimacy of the family, would have to take evidence?—Yes.

815. And either one of two things might happen: either expense would have to be incurred to make him informed by the ordinary sworn evidence, as is usual in such cases?—Yes.

816. And with power to the parties affected, against whom his discretion might be exercised, to appear?—Yes.

817. Or you must abrogate, to a certain extent, the existing rules of evidence, and permit him, without hearing the parties, to act upon information?—Yes.

818. To act, in fact, upon *ipsi dixits*, as they are commonly called, not sworn evidence?—Yes.

819. In any case, if an official trustee were appointed, you would not give him any of those powers at all?—No, he could not and would not exercise them.

820. As regards investments there are a certain class of investments with liabilities that you would not permit him to hold, I take it,—shares with liabilities attached to them, for instance?—He would not hold them.

821. But I imagine, if he is to be an officer appointed by legislation and the State's liability is behind him, it would hardly be advisable for the State to allow him to take investments with a liability upon them?—No.

822. Even if he would?—No.

823. Then the duty of the custody of the fund alone remains?—Yes.

824. Why is that not as well attainable by private trustees as with an official trustee?—I do not see any reason except that with the official trustee you have got the liability of the State at the back.

*Chairman.*

825. You have got the great public officer and the court as a control?—Yes.

Mr. *Kimber.*

826. And you have got to pay for it?—Yes; that is the whole question to my mind; is the risk worth the premium?

827. Let us look a little more closely into that; prudent solicitors generally recommend, in fact always recommend, a plurality of trustees, do they not?—Yes.

828. Generally more than two?—Yes.

829. In the case of the death of one?—Yes.

830. In the case of the official trustee being employed, and you have those private trustees as well, do you think he affords any additional security; supposing, for instance, those trustees are employed to exercise discretions, and the official trustee to keep the custody of the money, would you have it that he is to be bound to obey the order of the private trustees in the exercise of their discretions?—Yes.

831. He should have to obey their order?—Yes, he must be a mere custodian; a strong box to put the money into.

832. So that, if in the exercise of their discretions they did what they ought not to do, he would have to be (willingly or unwillingly) of necessity a party to it?—I take it that if the trustees proposed to do anything outside the trust he would refuse.

833. But I spoke of the exercise of discretions?—As long as it is discretion within the trust he ought not to have any responsibility, or any power of forbidding it.

834. Therefore, *pro tanto*, he would be of no use?—Just so.

835. And that would equally apply, supposing they obtained money to be given to a child in such cases as you put for one purpose, and then after they got the money apply it to another?—Yes.

836. As regards the application of the money for advancement or maintenance, would you leave that to the private trustees or the official trustee?—I should leave it to the private trustee.

837. You referred to the court giving power to relax the power of investment; would you be kind enough to state the extent to which the court considers it has power to relax the power of investment?—I rather put it to extend the power, did I not?

838. Yes?—

Mr. *Kimber*—continued.

838. Yes?—I thought that the judge in any particular case might be authorised under the circumstances to sanction any investment that he thought proper and not imprudent under the circumstances.

839. That is your suggestion for future legislation?—Yes.

840. But you observed that the court has that power to a certain extent now?—Yes, within the limits of the Acts of Parliament and the rule of court.

841. But not beyond the statutory power already given?—No.

842. Now as regards this power of distringas, there is no reason in the world, is there, why beneficiaries, if they want to make their funds secure and have only one trustee, should not put on a distringas?—No; I think it is decidedly prudent to do so under those circumstances.

843. It is very simple and very inexpensive?—Yes.

*Chairman.*

844. If you or I were a private trustee taking a good deal of trouble without any remuneration (I grant a sole trustee), and a distringas were put on, it might be right and probably would be, and I hope neither you nor I would resent it; but a good many people would think it was rather a strong order, would they not?—They would think it was a little reflection upon them.

845. Many a man would refuse to act; he would say, "If you don't trust me I shall not act," would he not?—I should not think of putting a distringas on if there was more than one trustee, but if there was a sole surviving trustee then it would be prudent.

Mr. *Kimber.*

846. You would advise first that there should be a new trustee appointed?—Certainly, to fill up the number of trustees.

847. And failing that, what would you advise?—Make yourself safe by putting a distringas on.

848. Which, if he were sensitive, that would perhaps drive him to consent to the first alternative?—Yes.

*Chairman.*

849. It is a mode of pressure. If you wanted a man to remain, in nine cases out of ten you would not put on the distringas?—No.

Mr. *Kimber.*

850. As regards these charitable trusts you do not suggest for a moment that that system could be applied to the administration of private trusts?—No, I only put that as an illustration of the mode in which funds can be kept safely while an administration is carried out by trustees.

851. As regards the administration of those trusts that are under the Charity Trustees, they have the advantage of being, for years if not for centuries, continued in the same line of distribution?—Yes.

852. And it is a simple case of paying out money to specific persons under a specific order?—Yes.

853. And there are no discretions practically to be exercised?—No.

Mr. *Kimber*—continued.

854. If there are, they are exercised by the Charity Commissioners who make the order, and that order indemnifies the trustee?—Yes, and there are discretions also sometimes in the trustee as to the mode of application.

855. As regards executorship under wills and administrations of intestacies, frauds generally do not arise in those, do they, because generally they are very quickly terminated?—Yes.

856. And the parties who are going to receive the money are on the *qui vive* on the death of their relatives, and, being very anxious to receive the money they look after the trustees to see that they pay it?—Yes.

857. And in case of intestacies the administrators have to give a bond to the State for due accounting?—Yes.

858. You spoke of easier access to judges in the administration of trusts. We do not want an official trustee for that purpose, do we?—No.

859. That could be as easily applied to the present condition of things as to an official trustee?—Yes; I suggested it by way of diminishing the responsibility of trustees.

860. Now as regards the cost of the establishment. This gentleman, necessarily having the prospective custody of probably millions (certainly millions if the office is to be useful) would have to be a very high-paid official, I suppose you would say?—Certainly.

861. Have you thought what salary he would receive; would it bear any analogy to that of the Receiver General of Inland Revenue?—Yes, I should think the class of official would be a man with a salary of 2,000*l.* or 3,000*l.* a year, or something of that kind. You would have a man of position.

862. Then he would require a staff?—Yes.

863. And an office?—Yes.

864. And safe deposits for the custody of securities?—Yes.

865. Many of which would be payable to bearer?—Yes.

866. By the way, as to bearers' securities, as things of that kind can only be held in the hands of one man at a time, there would be the same possibility of defalcation with the official system as there is with the private system, would there not?—Quite the same.

867. Then, just to diverge on this point, as regards bearer securities and other valuable securities, which are increasing, no doubt, by millions at the present time, is it not the practice of solicitors and prudent trustees to advise that these securities, under a settlement or will, should be lodged at the bankers in the joint names of the several trustees for safe custody as regards the capital, and should not be delivered up without the signature of all the trustees?—Yes.

868. At the same time allowing the bankers to collect the income and to apply it in many cases direct to the account of the tenant for life?—That is so.

869. That is very inexpensive?—Yes, it is automatic.

870. Then pursuing the question of the cost of the establishment, as you suggest people throughout the county would not submit to one place of

Mr. *Kimber*—continued.

deposit (London), it would be intolerable?—Yes.

871. And the large towns in particular would require to have a branch system?—Yes.

872. With a responsible officer and staff, safe deposits, and so on?—Yes, that is so.

873. Then have you considered what might be the initial cost, starting modestly, of an establishment of this kind?—No, I have not, but one perhaps may get some sort of clue from the large building by the Law Courts for the bankruptcy officials. There is a magnificent erection there, and the staff, which I believe costs about 80,000*l.* a year. Well, if the official trustee gets the management of all the trusts in the kingdom and you have to multiply his staff in London all over the country, you will want quite as much as that for the whole country. It is pure guesswork you know; you put me the question and I can only guess at it.

874. What do you think, from your experience, private families would be willing to go to, as the expense of securing the extra security, as regards the capital, of an official trustee; what expense do you think they would bear to have put upon their income as an annual payment?—I do not think one in a hundred would have anything to do with it at all.

875. Treating it only as a common agency for the collection of money, 2½ per cent. would be a small commission perhaps, but dealing in millions we might perhaps put it at one per cent.?—Yes.

876. Supposing it were one per cent.?—But then the answer is that we get it all done through the bankers. Trusts are almost invariably worked in this way: investment is made in the names of trustees, power of attorney is given to the bankers of the *cestui que* trusts to receive the dividends, and an order is given by the trustees to the bankers that as and when the dividends are received they shall pay a hundred a year, say, to the account of the lady, and the residue of the income to the account of the gentleman. Once done that remains in force until some change in the family takes place, or some change in the investment, and no charge or commission of any kind is incurred.

877. In point of fact, the securities representing capital are very seldom, if ever, touched by the trustees?—Very seldom.

878. Treating trustees as a class of accounting persons, and comparing them with other classes of accounting persons, such as brokers, bankers, brewers (who receive very large sums on deposit), and others, do you consider that the proportion of loss through the defalcations of private trustees represents anything like the same proportion as the losses by other classes of accounting persons?—Certainly not, nothing like it.

879. The law surrounds the case of trustees with much severer penalties, criminal penalties, as compared with what in the case of other accounting persons defaulting would be only civil penalties?—That is so. Then another element which reduces the losses in that way is the fact that trustees are generally in the plural. There are two or more trustees generally; and generally in addition there is a solicitor who is concerned for the trustees or the *cestui que* trust, and through whom the business goes; so that there are those safeguards.

880. And who, in most cases, would almost have to be *particeps criminis* to show them how to commit the fraud?—Yes.

881. And then the solicitors themselves, in a case of, not actual defalcation only but of improper advice, are amenable to very severe discipline to the courts?—Yes.

882. And information of misconduct of that kind causes the subject no expense whatever, as in the case of other defaulting persons?—No.

883. Have you any knowledge of what the Law Guarantee Society charges for the administration of trusts?—No, I am not on that board. Mr. Hunter, who is going to give evidence afterwards, is, I think, on that board, and he might tell you; I think they have had very few applications. I may mention that the Law Debenture Corporation, of which I am a director, undertakes the office of trustees for debenture holders. We have done that in connection with companies, but have had no applications, I believe, to accept trusteeships.

Mr. *Arthur O'Connor.*

884. I suppose there is now a very large amount of money in the hands of the Paymaster General in Chancery?—Yes.

885. Of the nature of a trust?—Yes.

886. It is rather an expensive luxury to have to deal with it from a beneficiary's point of view, is it not?—Yes. Not in simple cases, you know.

887. You were speaking about it being desirable to give trustees more inexpensive access to the courts; can you suggest any method which would be more inexpensive than the present system of originating summonses?—I thought a trustee might be allowed to take in a statement of facts to the chief clerk, and get the opinion of the chief clerk of the judge upon that statement. So far as that statement was accurate a trustee would be protected by the opinion given. If the statement was wrong the trustee would have no protection, and would be liable.

888. But all that would involve preparation, appointment, delay, and fees?—A certain amount, no doubt.

889. Assuming that there were an official trustee and that his office was really operative, he would require, as has been already said, to be moved to consent, or to act upon strict evidence?—Yes.

890. And that evidence would have to be of the same nature as is required in Chancery now?—Yes.

891. Taking into consideration the stringency of official administration and the delays which must to some extent, at any rate, attend it if the office is to be largely operative, would you not say that the tendency would be to diminish the income to the beneficiaries under trusts, taking them as one large body?—Yes, certainly.

892. Would you say that it is at all likely that the loss which is now incurred by *cestui que* trusts from the wilful default of trustees would amount to anything like the general loss to the whole body of *cestui que* trusts under an official system

Mr. *Arthur O'Connor*—continued.

system of this nature?—No, nothing like it, I should think.

893. In other words, you would say that the premium for insurance would be out and away beyond any risk that it would be used to cover?—There would be a very large profit on those premiums.

Colonel *Howard Vincent.*

894. You have favoured us with evidence of such length that I will not trespass upon you very long. I was unfortunately not here when you began. You have been in practice a great number of years, I understand?—Yes; about 37 years.

895. You have been President of the Incorporated Law Society?—Yes.

896. And as President of the Incorporated Law Society you were chairman of the Discipline Committee?—I was a member of the committee. I am a member of the committee now.

897. For how long have you been a member of the committee?—The committee was established in 1888 or 1889, and I have been on it for four years, I think.

898. Do you appear here as delegated by the Incorporated Law Society?—I have been asked by the Council; Mr. Hunter, the President, and I were asked to come and give evidence.

899. On account of the injury which this Bill is likely to inflict upon the profession, or in the public interest only?—In the public interest principally. As regards injury to the profession I do not think much about that. If you want to go into that at all, my idea about that is that in my case, at any rate, any institution of this kind will put more work in my way.

900. And that is your view after 37 years' experience?—Yes.

901. And you quite understand that the action which has been taken either by my honourable friend Mr. Warmington and myself, or by the late Government, or by Lord Herschell, is in no sense directed against the honourable profession of solicitors?—I quite understand that.

902. But the Incorporated Law Society has been rather pushed by the provincial societies in the matter, has it not?—I do not think the provincial societies have been more active than the central society.

903. I see that at a provincial meeting held at Leeds a paper was read in which it was stated that no serious objection was raised to the creation of a public trustee?—Yes.

904. That is your view as regards the profession?—Yes.

905. That is quite sufficient on that point. You have been four years a member of the Discipline Committee of the Incorporated Law Society?—Yes.

906. I ask this question, not in order to cast any slur upon the profession (you must not take it in that light at all), but as a matter of information: have many cases of breaches of trust been brought before them during those four years?—I do not know the exact number, but I should say that from the commencement of the committee we have not had more than about a dozen cases of fraudulent solicitor trustees.

Mr. *Kimber.*

907. And there are over 15,000 solicitors on the roll?—I think my colleague, Mr. Hunter, will be able to give you statistics as to that.

Colonel *Howard Vincent.*

908. He will be able to give the exact statistics as to that, will he?—Yes. From my own knowledge I should say that there had not been more than a dozen cases.

909. You stated just now, if I remember rightly, that you were so fortunate as never to have heard of a case of malversation of funds by trustees?—That is a little too wide. I have never had cases in my own business where I was concerned with trustees.

910. That is because you look after your business a little too well, probably; but you do constantly hear of such cases, do you not?—Every now and then.

911. In fact, you see them in the daily papers almost every day?—You do hear of cases; I will not put it higher than that; but I say that the proportion of them to the total amount of trusts is quite infinitesimal.

912. I will not mention any names, but you remember, of course, a celebrated case in Bedford-row?—Yes.

913. That was a very serious case?—Yes, a very serious case.

914. Were you concerned in the preparation of the memorandum which the Incorporated Law Society has put before the Committee?—I think I was a member of the committee; at any rate I assented to it.

915. You are aware that this memorandum is dated June 1892; but there was a previous memorandum in June 1889 that we have not had?—I think there was.

916. I happen to have a copy of it, in which it is stated that the society quite took the view that Leeds took, that there was no particular objection to the appointment of an official trustee as regards their professional interests?—Yes.

917. Could you tell me who were "the competent judges" who "anticipate nothing but failure" from the appointment of a public trustee?—The solicitors who have the management of trusts.

918. The gentlemen who drew this memorandum?—Those gentlemen, and the gentlemen who are members of the society, and have communicated with us on the subject.

919. I suppose it would not be fair to ask who drew it; I asked Lord Halsbury that question, and he said: "I should like to know (I must not cross-examine that paper) who are 'the most competent judges.' I should dimly conjecture that it was the gentleman who wrote that passage"?—I think, without saying anything unduly, I might say that the Council of the Incorporated Law Society are among the most competent judges.

920. We will not dispute that.

Mr. *Kimber.*

921. Do you know the number of the members of the Incorporated Law Society?—The number of members is about 7,500.

922. And the council are the appointed representatives of those gentlemen?—Yes; at any

Mr. *Kimber*—continued.

rate, that memorandum is prepared by the council from their own experience, and the experience of many members of the society, which has been collected by means of the various provincial law societies.

Colonel *Howard Vincent.*

923. I must take you very shortly, indeed, through this memorandum. I do not know whether you happen to have a copy of it. They say that the motives for desiring the appointment of a public trustee are, in the first place, "the alleged difficulty of finding fit persons who are willing to act as trustees." You are not aware that there is considerable difficulty in that matter?—In small cases there is difficulty sometimes.

924. I think in your own address, which was very interesting, you stated that there was "a widespread feeling in favour of some scheme."?—Yes.

925. And you have been so good as to state to the Committee to-day that there would be a tendency to throw all the business into the hands of the public trustee?—There would be a tendency on the part of the public trustee to grasp all the business; I do not know about throwing it into his hands.

926. But you quite understand that any proposal about the appointment of an official trustee would be absolutely and entirely voluntary?—Yes.

927. There would be no compulsion on behalf of any settlor or testator to employ the public trustee?—At first.

928. Well, there never would be any legal compulsion?—Yes; we have an exact instance in a case in point, the Land Registry. The office is created first; there is no demand for it. A large and experienced staff is started, and they must find something to do; their wares do not take, and so the public must be compelled to come in and purchase.

929. You are aware that Lord Herschell gave us his distinct opinion that there would be no difficulty in establishing an office temporarily, to see whether it was successful?—Yes, but I do not know that I quite agree with that. It is not one office; you must deal with it all over the country. The great towns, Liverpool, Birmingham, and Manchester will not stand centralisation in London. It was in consequence of their action that the Land Registry Bill provided that there should be registries all over the country, simply because of the action taken by the provincial towns; so that I think there would be great difficulty in starting it effectually except at a very considerable cost.

930. Do you base your objection upon the public ground taken in the memorandum, that it would "impose a large and permanent burden upon the public revenue"?—Yes, I think it would if it was unsuccessful; and if it was successful the official would be over-burthened with work.

931. Then, if he were over-burthened with work, people would not go to him. If he was difficult of access, as you have difficulties of access

Colonel *Howard Vincent*—continued.

to a judge, people would say, "We will not go to this over-burthened official"?—Then the office would be a failure, and the State would have to bear the expense.

932. But if Parliament felt that there was sufficient demand to incur that risk, you see no objection to its being incurred, do you?—No.

933. I see that this memorandum speaks of there being no difficulty felt among people of good social position in obtaining trustees. I take it that your practice is chiefly among people of good social position?—My practice includes a very great variety.

934. But principally it would be among people of good social position?—Principally, perhaps.

935. And you recognise that they would find it easier to obtain good trustees than poor people who have made a small sum of money?—Yes.

936. Do not you think, therefore, that a public trustee who would have the Consolidated Fund at his back, and be under the control of the State in a certain measure, would represent a greater guarantee for the safety of the funds than the private friend of a man who had very few friends?—Yes; but the mischief is that those poor people cannot afford it.

937. Therefore, to be advantageous to the community at large, the fees charged by the public trustee must be very small?—Very small, indeed.

938. Is it a fair question to ask you, roughly, how many trusts you are trustee to?—I do not think I could tell you.

939. Would it be 30 or 40?—Twenty or 30, perhaps.

940. Then, in the event which I hope may be very distant, of your departure, that would entail very considerable expense upon the whole of those trusts?—Yes, it might.

941. And do not you think, therefore, that it would be advantageous to the *cestui que* trust and the beneficiaries to have a trustee who would never die, who would never leave the country, and who would never become incapacitated by age?—Provided the expense was not much, and provided that that trustee would not be a cast-iron person, but a man with all the knowledge and all the discretion of a friend, I grant you, he would be an ideal trustee then.

942. Then of course I need not say, when you speak of the expense, that the transfer of trusteeship is a considerable expense; in the whole of the, say, 30 trusts in which you are a trustee personally, the appointment of a new trustee would be a matter of expense to the beneficiaries or to the estate, would it not?—It is a question of degree; I mentioned a case this morning to the honourable and learned Chairman (I do not know whether you were in the room then), of the last experience which I had got, which was this: I had a letter this morning from a client thanking me for completing the appointment of a new trustee together with him, for his sister's settlement of trust funds amounting to 5,000*l.*, and enclosing a cheque for 8*l.* 7*s.*, the amount of my costs, and thanking me for the amount of trouble which I had taken; that gives you an idea of it.

943. I suppose

Mr. *Arthur O'Connor.*

943. I suppose that unless the public trustee is to be sole trustee you would still have the necessity of renewing trusts when a private trustee had died?—Quite so.

Colonel *Howard Vincent.*

944. I think, in reply to Mr. Kimber, who knows a great deal more about the matter than I do, you said that solicitors always recommend the appointment of a plurality of trustees?—Yes.

945. But does not plurality of trustees increase the expense of the trust very considerably?—Slightly, because you have to send documents round to be signed by all of them.

946. And that is not a gratuitous service?—No.

Mr. *Kimber.*

947. But that would equally exist if you had private trustees braced with the official trustee?—Yes; but I understand that the honourable and gallant Member is putting a contrast between the official trustee on the one hand and a plurality of trustees on the other; and I admit that there is a saving of expense in that way.

Colonel *Howard Vincent.*

948. And then, of four trustees (taking that as the number), some are shifting their addresses, some leaving the country, others die and others do not come in and attend to the business; and those are all expenses to the estate?—Yes; those are all little rubs on the green.

949. That, of course, would be so if private trustees were associated with the public trustee; but do not you think that probably, if a public trustee was established, and his office was successful, there would be rather a tendency to make him sole trustee?—I have no doubt that if it was a success it would attract business.

950. And if he were sole trustee, then the expense or the inconvenience to the public would not be greater than under the present system, would it?—No; but you must look at what you are paying for. You want a trustee, and a mere holder of funds is not a trustee.

951. Your idea is that he should be a mere holder of funds?—Yes. What I mean is this: you are contrasting the official trustee with private trustees. Where you have private trustees you have men who have knowledge of families, facts, and circumstances with a friendly feeling, and ready to confer with their *cestui que* trusts. On the other hand you have an official who has simply to go by rule of thumb, and to act upon evidence. One is a court and the other is a trustee.

952. I see what you mean about that; you have read the Bills which have been introduced, have you not?—Yes.

953. I see that this memorandum states, on page 4, that "private trustees, who are personally inclined to show a benevolent consideration, are willing to run some technical risk in order to secure a considerable advantage for their "beneficiaries;" is that so?—That is often done; I have often done it.

954. Is not that risk very often very unfortunate if it turns out in the loss of some of the *corpus* of the estate?—Yes, it may be,



Colonel *Howard Vincent*—continued.

955. And that is bad for the beneficiaries, and bad for the remainder-men?—Yes, that is so, no doubt, sometimes.

956. I suppose you would be of opinion that a very small proportion of breaches of trust are ever brought to light; that they are arranged very often?—Yes, I think a very small proportion; but I should like to emphasise what I said before, that all breaches of trust are not criminal. The main point which I understand is aimed at now is the safety of the funds from fraudulent trustees.

957. It is exceedingly awkward for me putting a question which appears to cast a slight on the profession, but I beg you fully to understand that that is not my intention?—I quite understand.

958. I suppose you quite admit that as a member of the discipline committee for four years, that only a proportion of the breaches of trust which have been unfortunately committed by solicitors reach the ears of the discipline committee?—No, I should think that the majority of cases come to the committee.

959. How is the discipline committee set in action?—By a short affidavit of the circumstances made by any person interested and sent in to the society.

960. Mr. Butcher, who has had considerable experience in this matter, but who has unfortunately been obliged to leave, has asked me to ask you on his behalf as to a distringas; a distringas is very seldom applied, is it, in the case of trusts?—Except where a reversion has to be dealt with.

961. And a very small proportion of beneficiaries would know anything of the advantage of a distringas?—Very small.

962. You do not think that there would be any difficulty, do you, in arranging for every access to the public trustee, easier even than to the judge in chambers; you would simply have to go to his chambers and ask him this or that?—It would be easy; but you do not know what he would act upon. If the *cestui que* trust calls upon his trustee he may settle everything in an interview; but if he calls upon an official trustee, in the nature of things that cannot be. He must act upon a written statement and must be satisfied by some evidence that the facts stated are correct.

963. I noticed just now that you said you thought the public trustee would be chary of advancing money to a child going over the sea to the colonies, or for forwarding any family arrangement?—Yes.

964. But you also added that the child did not very often fulfil the hopes entertained, and that it was money stolen from the trust?—I put a hypothetical case which might happen.

965. But it would be, of course, an advantage to the trust that there should be greater stringency in keeping the *corpus* of the trust together?—Yes.

966. No doubt you have read or will read the evidence given by the distinguished judges who have favoured us with their views upon this subject, Lord Herschell, Lord Halsbury, and Lord

Justice

Colonel *Howard Vincent*—continued.

Justice Lindley?—Yes, I have seen it in "The Times."

967. You have seen that they are all very much in favour of the appointment of a public trustee?—I thought Lord Justice Lindley approved of it in a very qualified way.

968. Perhaps I may just read you an answer of Lord Justice Lindley; I asked him if his experience did not lead him to believe that the community suffered from breaches of trust, and he said that "very much" is a relative term. Then I asked him on what is a very important matter, because one cannot ignore that the solicitors are very active in opposition to this measure, whether he thought that it would be very detrimental to solicitors, and his answer was, "I am not at all sure whether it would not be to the benefit of the profession;" and that, I take it, is your view also?—Yes, pecuniarily.

Mr. *Arthur O'Connor.*

969. I should also like to ask you a question with regard to Lord Justice Lindley's evidence. He was asked whether, having regard to the loss to the whole body of the *cestui que* trusts, the remedy might not be as bad as the disease, and he said, "I think if care were not taken the remedy would be quite as bad as the disease, but if proper care is taken the remedy may be, I think, not quite as bad as the disease." You agree with that?—Yes; and I was going to say, in continuation of what I said to Colonel Howard Vincent, that though, pecuniarily, this appointment might benefit solicitors it does not in other ways; because the solicitor has to bear the brunt morally of the expense and delay which are inevitably incident to dealing with public departments of that character.

*Chairman.*

970. I think you must feel that it would be a very shocking thing if we can do nothing to prevent the defalcations of trustees, assuming that it is the case that there are large numbers of them who defalcate every year. Have you any other suggestion, beyond that of a public trustee, by which poor people with small trust estates could be safeguarded?—It does not seem to me to be feasible. You cannot insure people entrusted with money in any direction, bankers, brokers, and agents of all kinds; you cannot insure them against misappropriation, and you cannot insure trustees against it. But trustees are more hedged and safeguarded than any other class of men who are entrusted with money; and if you bring in the great machinery of the State to take care of these trusts you

*Chairman*—continued.

are bringing in a Nasmyth's hammer to crack a nut, very often.

971. Is it not the case that those who are the objects of trusts are very often people who are themselves defenceless, like infants and married women, and that those are the persons who suffer; it is not quite the same as dealing with a stockbroker or banker; you and I may look after ourselves?—No; but then I say that they are under the care of trustees who have been selected for the purpose, and who are hedged about with safeguards that agents and others are not hedged about with.

972. But you have no other suggestion or alternative to make to the Committee for the purpose of further safeguarding these people, have you?—I do not thing I have anything further.

973. Is there anything that you would like to add to your evidence?—I do not think I can usefully add anything.

Mr. *Kimber.*

974. The official trustee would naturally and necessarily have to be allowed to employ professional advice and assistance himself?—Yes.

975. And probably an official accountant?—Yes.

976. And an official banker?—Yes.

977. And various other officials in different lines of business?—Yes.

Colonel *Howard Vincent.*

978. You are quite aware that the whole of the Bills which have been presented to Parliament provide for the continuance of the employment of the family solicitor, banker and surveyor?—Yes; that is in your Bill, I think.

979. That is in all the Bills?—Yes.

*Chairman.*

980. Is there anything else that you wish to say?—One other suggestion which occurred to me was, whether it might be arranged that trustees could get an occasional audit of their accounts through the chambers of one of the judges, so as to see that everything was in order; just something parallel to the auditing of accounts by public auditors every twelve months.

981. Would you make that compulsory?—No, I would give facilities for it.

Mr. *Arthur O'Connor.*

982. Would that involve the production and identification of title deeds?—I think it would involve the production of vouchers.

983. And securities?—I think it should, properly.

Mr. JOHN HUNTER, called in; and Examined.

*Chairman.*

984. YOU are President of the Incorporated Law Society, are you not?—Yes.

985. And have been on the council since 1882?—Yes.

986. And I believe you have practised 35 years as a solicitor?—Yes.

*Chairman*—continued.

987. With great experience in the administration of trusts and executorships?—Very considerable.

988. And in family business?—Yes.

989. Are you also one of the original directors of the Law Guarantee and Trust Society?—Yes.

990. Do

*Chairman*—continued.

990. Do they undertake the business of trustees and executors?—I think they are one of the very few companies that take private trusts as distinguished, I mean, from debenture trusts.

991. Upon that may I ask you, in order that we may deal with that point when it arises, does that society act much as executors?—We have not yet acted in one single case as executors.

992. But it is part of your business to do so?—We laid ourselves out to do it, but we have not yet, unfortunately, succeeded. A gentleman said to me the other day that everybody's in whose will he had put the appointment had continued to live in a most provoking manner. He thought it was a good advertisement.

993. A happier result may follow?—Perhaps so.

994. Do you know of any of these societies, besides this one, which has ever acted as executors?—I do not know any one of them in England that has acted as executors. In England they have acted as trustees.

995. Accordingly, if a public trustee were appointed I suppose it would not interfere with any substantial business, as a matter of executory, at all events?—I do not think it is at all probable that a public official or a public company would successfully act as executors. That is my own opinion.

996. At all events there is no large existing business?—There is no question of competition at present. I know that the Law Guarantee Company have had their names put into several wills, not by me; but I have heard it from my fellow directors, who are all solicitors.

997. What is the scale which the society charges?—Our table of rates is published. At the time the society accepts the trust or undertakes to insure the same (that is the alternative scheme) they charge a percentage on the capital, by way of single payment, of 1 per cent. up to 5,000*l.*, with a minimum fee of 10*l.*; 15*s.* per cent. from 5,000*l.* up to 10,000*l.*; and 10*s.* per cent. above 10,000*l.*; with a *nota bene*: "Special arrangements made as to large estates;" which we have not got. That is, when we take a trust. Then we propose a similar payment on any capital withdrawn from a trust for any purpose, or when the fund is distributed, with a minimum fee of 5*l.* on final distribution.

998. That comes to 2 per cent.?—One per cent. when they go in, and 1 per cent. when they go out. That is the calculation, up to 5,000*l.*, that is to say. Then there is a percentage on change of investment, varying from 2*s.* 6*d.* to 10*s.* per cent., and if we receive the income we charge 2½ per cent. on the income for managing the income.

999. Have you acted largely as trustees?—No, we have only had 21 cases since the company was started, and all of these small ones.

1000. How long ago was that?—I think we started in 1888, that would be seven years.

1001. About three cases a year that would be?—Yes.

1002. Do you know of any other society which carries on trust business to any large extent?—No; the Trustees and Executors started to do that, but they did a very small business in that way, I believe.

1003. They do a large business in other ways, I fancy?—They did a large business as trustees for debenture holders; but they did a very large speculative business besides in another way altogether, of course.

1004. May I take it that, so far as you know, there is very little business of this kind, in point of fact, done by any companies, or societies, in this country?—Very little, I think.

1005. I believe it is done more in America?—There are trust companies there to a great extent.

Mr. *Kimber.*

1006. Do you know of any American trustee companies that do any business of any magnitude in private trusts?—No, I do not.

1007. They are all trusts for great corporations, such as railways, I think?—I do not know.

*Chairman.*

1008. I believe that you are also a director of the Guardian Fire and Life Insurance Company, and have a great deal to do in that capacity with money invested on the securities of life interests and reversionary interest in trust funds, and so forth?—I am on the investment committee.

1009. I believe you suggested the legislation which resulted in the Trustee Act of 1888?—Yes.

1010. I need not trouble you with all the information which you have been kind enough to give us in detail in your proof, but in the end the Act that was passed was intended, was it not, to correct the effects of certain decisions in the Courts?—It was limited to that, or pretty nearly so. I got a few extra clauses in, but not all I wanted.

1011. And I believe you have also been chairman of the Discipline Committee, appointed under the Solicitors Act of 1888?—Yes, and I was on it for a year or two besides, before I was chairman.

1012. As some questions have been asked with regard to the proceedings of that committee you might like to give us any information that you are able to give upon that subject, appreciating, of course, that this is not an inquiry directed against solicitors?—Quite so; besides, we should come out very well if it were. We think it is very creditable to us. Mr. Lake is the present chairman. I asked him, and I asked our secretary, who manages this part of our business, to get me out a statement of the number of cases that have been heard by the committee, in which they reported against the solicitor, and which involved misappropriation of trust funds by a solicitor trustee. There have been 14 cases during the seven years which came before that committee. In addition to the cases that came before the committee, wherever a solicitor is convicted by the Common Law Courts, of any criminal offence the society apply, or almost invariably apply, to strike him off the rolls; and I am told that there have been only four cases during those seven years of that description, where solicitors were trustees. The great majority of cases, I may explain, that have come before that committee in my time have been cases in which you might call the solicitor a trustee in one sense, but not in a sense where a

*Chairman*—continued.

public trustee would be any relief. For instance, one was a case in which a sum of money was given to a solicitor to buy an annuity ; there was some delay in the transaction, and the money disappeared. One or two were cases where purchase money had been received by solicitors either to pay the purchase, or occasionally where they had sold as between themselves and private clients, I mean to say. Those are not included in this list, because this list is limited to cases of solicitor trustees.

1013. That list is limited to cases where the solicitor was, by the instrument creating the trust, named a trustee?—It was intended to be so. There is one case which I see has a pencil note against it, stating that the solicitor was acting for the administrator.

1014. Supposing there were cases where other persons are trustees and the solicitor acting for them in that capacity, acting as solicitor purely, obtains the money and makes away with it by reason of the laxity of the trustees, whatever cases there were of such a nature would not be included?—Those are not intended to be included in this list ; but there is one of them (it was not a case that I had), where there is a pencil note that it was so in that particular case.

1015. Is it common to appoint solicitors trustees in the instrument creating the trust?—It is very frequently done. It depends very much upon the position of the settlors and their *cestui que* trusts and their connections.

1016. It would not be done in the case of poor people much, would it?—Not much, I think.

1017. It would be done mostly, I suppose, in the case of families where they had a family solicitor in whom they placed implicit confidence?—Yes, but I think small settlements are diminishing very much in number, in consequence of the Married Women's Property Act. My experience is that there are very many fewer settlements where there is only 1,000*l.* or 1,500*l.* to settle now that a married woman retains control over her own property, and they are educated by degrees into knowing how to take care of it.

1018. How many solicitors are there on the roll in England?—15,000.

1019. You are yourself, also, I think, a trustee, in about 50 different trusts?—I counted 47 the other day, when I reckoned them up.

1020. What do you say with regard to the desirability of the appointment of a public trustee?—I do not think there is any demand for it within my own experience ; I never but once was asked whether I could render any assistance towards getting such an official appointed.

1021. But your business is a large business, a family business, and you must come in contact, I presume, with clients of good financial position, I say nothing about social position, but wealthy people, largely?—I have plenty of poor clients, too. However, the poorer class of people would not be at all likely to originate the suggestion of a public trustee, it would not occur to them.

1022. Do you think there is much defalcation ; I am not speaking relatively, but absolutely. We have heard from the Lord Chancellor and Lord Halsbury, and Lord Justice Lindley also, that they thought there was a considerable defal-

*Chairman*—continued.

cation?—I have been trying to recollect. I think there are only four or five cases within my own professional experience ; I am not speaking of the societies, but of my own private practice, which I have come across where there have been robberies; defalcations of that sort. There is a good deal of money lost through injudicious investments, no doubt.

1023. Investment in excess of the powers of the instrument, that is to say?—Frequently outside the powers ; however, everybody has lost money in the last five years, of course.

1024. But, apart from that, do you think there are not many losses?—I do not think there is any very large amount of fraudulent misappropriation.

1025. I understand you to think that there would be great difficulty in a public official carrying out the duties of an executor?—Certainly.

1026. Will you just explain to us what those difficulties would be?—The first thing that an executor has to do is to bury his testator ; it is more convenient for somebody connected with the family to do that than anybody else. Certainly my experience is, invariably, that as soon as the man is buried the widow and the family want some money to carry on with, and they have either to beg or borrow from the solicitor, trustee, or banker. Then when the time comes for proving the will, a large sum of money has to be provided, which has to be borrowed from a banker or solicitor for the estate duties ; and then after you have got the probate there are all sorts of confidential duties to be performed by the executors, such as destroying the deceased's papers and making arrangements for the family and household establishment, giving notice to servants, and all that sort of thing, which I think are very much better done by members of the family, or people that they are personally acquainted with, than by a public official or a public company. I always thought that we should never get any executors' business in the company.

1027. In the society you referred to, have you power to be sole executor?—Yes, we have power.

1028. But I suppose you prefer in that society to share your duties with members of the family, which you have the power to do, of course?—Yes ; so far as the trusts are concerned, that is what we contemplate doing. So far as regards executorships, I have heard trusts discussed at that board, where there are 15 or 20 solicitors sitting round the table, all of whom know as much about such things as any 15 or 20 people you could find ; but they are very much more particular, and stand much more on formalities sitting there together than any one of them would be sitting at his own table, I am quite sure.

1029. Would you see any difficulty if the family executor was to carry on the executory business with the family solicitor the same as before, and there were a public trustee who should safeguard the money?—When it is realised and ascertained, when you have got to the end, practically, of the executorship, then the trust begins. In the great majority of cases the executorship is over in 12 months. Then there may remain the fund which has to be held for a generation on trust ; but

*Chairman*—continued.

but although the original man is still called an executor, practically he has become a trustee so far as regards his duties and liabilities.

1030. Supposing that a man wished to have a public trustee joined with one of his family for the purposes of the executorship, would there be any difficulty in that?—Not any more than administering under the Court of Chancery. If an administrator is plaintiff, he cannot move hand or foot without asking the opinion of the court and taking the directions of the court; but there we always find that it is more convenient that the executor should be a defendant rather than a plaintiff, because he has so much more liberty of action without applying to the court.

1031. But then the administration proceedings in the Court of Chancery are not proverbial for their dispatch or simplicity, are they?—They are getting a good deal more vigorous than they were, very much more expeditious.

1032. Speaking for myself, I have not much to do with that court, except so far as I happened to be concerned myself in an administration suit. I wish to ask you, is it not the fact that an administration suit in the Court of Chancery is a very expensive proceeding?—No, not a tenth part of the cost of proceedings in administration in bankruptcy; there is no percentage to pay to anybody, you see, and no criminal investigation.

1033. But, of course, as we know, there are different considerations arising in bankruptcy; there are all the inquiries as to the conduct of the bankrupt?—But if a man died insolvent, and at the same time another man failed, being alive, the estate of the deceased insolvent would be realised very much more cheaply in the chief clerk's chambers than the estate of the living bankrupt would in the Court of Bankruptcy, so far as my experience goes.

1034. Supposing the case of a will, leaving, say, 5,000*l.* with the interest, to the widow for life, and then to be divided between five children, 1,000*l.* for each, and directions to invest the money in particular securities, what would be the necessity for administration; would it not be sufficient, if there were a public trustee, to pay the interest to the widow for life, and then when that is over an application to the trustee to verify the death of the widow and to pay the capital over?—If the executorship were completed the trust would begin, and be limited to that; but until the executorship was completed the public trustee would have to get rid of all the liabilities of the testator and wind up his affairs generally. There are a good many hidden liabilities; for instance, a little while ago I was winding up a man's estate, and six months after his death I found he was surety for somebody; I had to find out what had become of the liability and get some new surety; that came to my knowledge incidentally.

1035. Then, in fact, you think that an executorship nearly always requires exercise of discretionary administrative duties?—Yes; I think it would be very inconvenient to have a public official as executor; and I think there are very few cases in which there is any loss pending the executorship; I think the losses



*Chairman*—continued.

come afterwards when things have settled down and the money is invested and put away.

1036. At all events, would your objection be met provided there were associated with the public trustee a person of the family who should be joined with him?—I think then that the funds would be all well looked after, and the costs would not be greater than administering in Chancery; but I think most of it would be much the same, so far as I can form an opinion.

1037. I gather from what you have said, as well as from what you have told us in your proof, that there would be less difficulty in a public trustee acting as the trustee of an ascertained fund?—Very much less, I think.

1038. But you consider that the public are better served by a private trustee than they would be by a public trustee?—Yes, I think so.

1039. That is assuming he is an honest trustee?—Yes, I think so, taking it all round.

1040. I think we should all agree as to that if you could rely upon the honesty of the trustee?—And I think you can.

1041. Do you think that a public official acting as trustee would be more difficult to deal with than a private trustee?—There can be no doubt about it in my mind.

1042. That would greatly depend upon the manner in which the public trustee approached his duties, would it not; do you not think he would improve by experience, even assuming that he was bad to begin with?—Individuals, of course, are very different. It is quite notorious that we can get on very much more easily with one judge than with another in the Court of Chancery.

1043. I observe that you apprehend that after commencing with a voluntary or permissive system you would soon come to a compulsory system; upon what grounds do you base that opinion?—My opinion upon that is based upon what we have seen in the other two cases, of the land transfer and the official liquidator.

1044. I do not think I will pursue those two analogies; they are only analogies, after all?—That is all. Our view about them is that they are two sets of officials who hold offices which they could not make pay, and which they have had to struggle to make pay.

1045. Upon the question of cost a great element in your consideration, of course, and that of everybody else, would be what it would cost to set up this public trustee. Do you not think, with Lord Herschell, that you might utilise the existing district registrars with advantage?—Yes; I do not think there would be any difficulty about that.

1046. I mean that that would not involve any considerable expense to begin with; supposing you were to start with six or eight district registrars, with one central official in London under the direction of the Court of Chancery, there would be no sensible addition to the duties of the registrar unless he got a great deal to do, would there?—No, I do not suppose it would add much to his duties. I do not know whether the district registrars are paid by salaries or by fees. The High Court Registrar, you mean, not the

*Chairman*—continued.

county court registrar. I so understood Lord Herschell.

1047. Yes; I observe that you think the Official Receiver is to a certain extent interfering with professional men who would otherwise act; that is the old conflict between officialism and voluntaryism?—Yes, that is a standing conflict, no doubt. There is one particular thing I should like to mention, as to the way in which the Official Receiver derives his income from the interest on funds which really belong to somebody else.

1048. You mean that the interest is paid to the public?—Yes; he derives his income from the investment of funds which, if they were not invested, ought to be distributed amongst the creditors. According to the Official Receiver's last annual report he earned 14,000*l.* in that way. Now, as he can only invest in Government securities at 2¾ per cent., he must have had half a million of money for a twelvemonth waiting for distribution.

Mr. *Arthur O'Connor.*

1049. And if a private trustee had done that he would have rendered himself liable to an action?—Yes; but this is done under a clause of the Act of Parliament. My point is, that it puts a very strong temptation in the way of the Official Receiver not to hurry himself, to put it at the lowest.

*Chairman.*

1050. That might be obviated, might it not, by providing a fixed scale of remuneration to the Official Receiver, and a fixed scale of payment by the different estates?—Yes; I do not mean that that goes to him, but it goes to the credit of the fund, as a relief of the fund to be voted by Parliament.

1051. But that would not be possible if we had a public trustee, unless the Act of Parliament sanctioned it?—As a matter of history only I believe that the Accountant General of the Court of Chancery used to derive a very handsome income in the same way.

1052. Yes, those were the old days, when the paymasters of the Army and Navy used to make enormous fortunes?—Yes, when they were the best things to be had.

1053. Because there was an honourable or dishonourable understanding that they might keep the interest?—Yes.

1054. But that could not be done now without an Act of Parliament?—As between a private person entitled to the fund and the public, I am not so sure. I do not mean the public trustee, I mean the public. Then there is another point I should like to mention, about the way in which the Paymaster General of the Court of Chancery deals with his dead accounts. The Bank of England, when they find that dividends have not been received for nine and a half years, ferret about in every direction to see whether they can find any claimant to the funds before they transfer them to the Commissioners of the National Debt. The Paymaster of the Court of Chancery never does anything of the sort, but lets them all go to swell the reduction of the National Debt.

Mr. *Arthur OConnor.*

1055. Do you not think that private trustees may also retain in their hands funds as to which there are no claimants?—Yes, they might; but at all events they are called over the coals when they are found out.

*Chairman.*

1056. And so have others done; I am afraid that is only the propensity of human nature, if you do not know to whom the money belongs; you have told us that you do not think there is much defalcation, and you illustrate that by your experience at the Guardian Insurance Company?—Yes. We have 150 different investments there, the total of our investments being something like 400,000*l.*; and they tell me they have no instance of any loss by defalcations of trustees there; and although they are protected wherever they can be by distringas and stop orders, there is a substantial amount of trust funds invested on mortgages on which there is no possibility of putting a distringas.

1057. No, but then you take a transfer, do you not; I do not quite follow you?—I mean this: a man comes to us and says, "I am entitled to one-fifth of my father's estate when my mother dies." "Where is your father's estate invested?" "Consols, Railway Stock, and so much on mortgage in the names of trustees." We cannot take any transfer which will give us any hold of that mortgage debt, because that is a debt due to the trustees of the will, and we are only dealing with a person equitably interested in an undivided share of that.

1058. But cannot you give a notice to the trustees which will prevent their parting with the money?—Yes, unless they choose to be fraudulent; my point is, that there is a large amount of trust funds entirely at the disposal of trustees over whom we have no control beyond what the Court of Chancery gives us.

1059. But of course you can always ascertain what the character and standing of the trustees is?—Yes.

1060. And you know your ground?—Yes; my only point is, that we have been dealing with these things for three-quarters of a century, and they tell me we have never had a loss.

1061. You suggest, I think, some alterations of the law; you think, I understand, that a trustee ought to have greater facilities for retiring from his trust if he thinks fit?—Yes; to get out of his trust.

1062. For example, if he is over 60 years of age, or after 20 years as trustee?—Somebody drafted that clause and put it into the Bill of 1888, but it did not get through; it was struck out.

1063. You still think that ought to be done?—I think it would be an advantage that a trustee should be at liberty to retire under some machinery; and I think, still more (that is my personal opinion), that it is a great hardship that an executor cannot renounce trusts which he inherits without renouncing the executorship of his own testator's will.

1064. The case being that an executor who acts as executor of a deceased person, and then finds that the deceased was himself a trustee, has

*Chairman*—continued.

has to take upon himself a sort of double trust?—I instance my own case. I asked a friend of mine a little while ago to be my executor, and he said: "Well, what am I to do about your trusts; I do not mind being executor to you, and looking after your family;" and when I told him I had 40 or 50 trusts, he said: "No." I should allow an executor to renounce all or any of the trusts that he inherited, as distinguished from the trusts under his own testator's will.

1065. You also think that facilities should be given to enable trustees, and especially executors, to pass their accounts of capital and to procure a definite approval of them without waiting for infants to come of age?—I think that would be a great advantage. I can mention a case where I had been executor. The estate realised 25,000*l.*, of which I had to use 15,000*l.* for payment of debts and legacies, buying annuities, and things of that sort, and 5,000*l.* I put away till a child comes of age who is now 12 years old. When that child comes of age I, or those who come after me, will have to produce all the vouchers showing the expenditure of the 15,000*l.*; and I should like to be able to get rid of that, and to pass that account once for all and get a certificate that 5,000*l.* only is due to the child. I only suggest my own cases as things which have come to my notice.

1066. Do you think it will be possible to do as the last witness suggested, namely, to have the accounts examined by the court, for example, annually, or at fixed periods?—I do not think that is required, except when you have a running account with capital. As a rule your executorship lasts for a certain term, and then it is ascertained what the residue consists of.

1067. I am speaking of trustees?—Trustees, as a rule, have very little to do with capital; they hold it until some one comes of age, and *sui juris*, and can give them a discharge.

1068. If that is the case, that they hold it only until some one comes of age, could not that be equally well done by a public trustee, and with greater security?—Of course, there would be greater security, there is no doubt about that.

1069. What I want to ask you is, is it not the case that all these discretionary matters which may come upon a private trustee are exceptional, and that as a rule his duty is to sit tight with the money in his pocket, and honestly keep it?—The duty of a trustee, no doubt, is to take care of the capital until somebody becomes entitled to it.

1070. There is another suggestion which you made which I should like to ask your opinion about, namely, that where trustees have honestly made a mistake they should have the protection of the Statute of Limitations. I suppose you mean in cases where they have acted as reasonably prudent men?—Yes, the Court of Chancery expects them to be unreasonably prudent, there is no doubt, supernaturally prudent.

1071. You think that in such cases they ought to have the benefit of the Statute of Limitations?—Yes, I tried very hard to get it, and my colleagues, at the Council of the Incorporated Law Society, told me I should get nothing at all. But I got half-way. We did get the Statute to run as soon as an infant came of age, and have held it effectually. We were doubtful whether the clause would hold water, but it has.

*Chairman*—continued.

1072. Would you exempt them from liability altogether where the court considered that they had acted with reasonable prudence, and, of course, with perfect good faith?—Yes, I assume good faith. The clause which we did get into the Act of 1888 was based on one which was put into the Bankruptcy Act a few years before, which, for the first time, enabled a bankrupt trustee to get a discharge when he had honestly made a mistake, as distinguished from a fraudulent act.

1073. I believe you also think it advisable that there should be some authority, partly judicial and partly executive, or financial, one would rather say, to approve of classes of investment for trust funds?—I think that would be very desirable.

1074. The Lord Chancellor and the Chancellor of the Exchequer, for example?—That is one suggestion; or the Rule Committee. There is some power in the Lord Chancellor, I think, to make a rule allowing the investment of funds which are under the control of the Court of Chancery: and then there is another general statutory enactment that trustees, as a rule, may invest in funds approved by the Court of Chancery if they make an order for their investment. But they never do make a general order, or, if they do, they revoke it in a fortnight. Lord Halsbury made one. When we were trying to get the 1888 Bill through, Colonial Government Securities had been inserted as a trust investment in the draft of the Bill as it came down from the House of Lords, but when it got into the House of Commons the Government objected to the clause. Lord Halsbury, I suppose, had not found that out, and in the meantime he made an order authorising funds under the control of the Court of Chancery to be placed in that class of security. Then within three weeks he revoked it; the Chancellor of the Exchequer made him, I have no doubt.

1075. Then there is another case, which perhaps you will express in your own way, in which a recent decision of Mr. Justice Kay appears to have operated harshly?—That was a case in which a well-known solicitor in the West End of London, being a trustee, sold a Stock Exchange security, and the proceeds were invested in a mortgage; the mortgage was realised in due time, and there was no loss upon it; but in the interval the class of Stock Exchange security, which had been sold out, had gone up in price, and in consequence of the former sale and subsequent re-investment there was a loss to the trust fund; and because the mortgage security was not technically within the prescribed rules of the Court of Chancery, which are exceedingly stiff still, the trustee was held responsible to make good to the trust fund the loss which accrued by the sale and purchase.

1076. That, I suppose, was an undeniable conclusion from the authorities as they are?—I think it was stretching them further than they had ever gone before.

Mr. *Warmington.*

1077. There was no authority to invest on mortgage in that case, was there?—If I recollect the case rightly, it was only that the mortgage was not a technically correct one. There was no loss on the mortgage debt.

*Chairman.*

1078. Have you any other suggestion to make?—If I might mention one other point that occurred to me just now, when you were examining Mr. Walters, it is this: that if you want to avoid frauds by trustees I do not know that the Legislature can do it successfully, but all frauds are committed where there is only one trustee, at least 90 per cent. of them; and if you could enact that there should never be less than two trustees I think that would go a long way towards a complete safeguard.

1079. But you cannot perpetuate a man's life by Act of Parliament; does not that rather import that where one trustee is left alone by the death of his co-trustee, there ought to be some public authority to come in?—No public authority could ever find it out, of course, until he is set in motion.

1080. Supposing a trust consisting of two persons and one of them dies, in such a case would you be in favour of enacting that an official trustee, or any one you please, should at all events be *ad interim* trustee until another trustee was appointed?—The most effectual protection by law, I think, would be to provide that the trust should survive to the executor of the deceased testator until there was another trustee appointed.

Mr. *Warmington.*

1081. Making them tenants in common instead of joint tenants?—Yes.

Mr. *Arthur O'Connor.*

1082. I thought that was the very thing which you were objecting to just now?—What I was objecting to was that a man who is executor of a testator who happens himself to hold several trusts cannot renounce any one of his trusts without renouncing the entire thing. I do not so much object to their descending to him if he can get out of them without renouncing the probate of his own testator's will.

*Chairman.*

1083. Do you not think it is rather hard to saddle a burden by Act of Parliament upon a private individual which he never contemplated?—It is done now. Trusts descend. It is only a question whether they should descend to the representatives of the two last trustees or of the last trustee.

Colonel *Howard Vincent.*

1084. Might I just ask whether your executors at the present time would inherit your 50 trusts?—In every case in which I was sole trustee at the time of any death.

Mr. *Kimber.*

1085. And they could not renounce them?—They could not renounce any one of them without renouncing my own estate also.

*Chairman.*

1086. I hope you will not want an executor for a long time, or any one of us; but it is a very formidable thing for anybody to act as executor to a gentleman situated like yourself?—Of course it is. I believe the best protection is to die intestate and insolvent, if you can arrange it so. I have often said so.

1087. This unfolds a most alarming prospect?—Of course when I say I am trustee of 47 trusts, I am not sole trustee in more than one or two; but I may be the surviving trustee of any one of them.

1088. But do you not think that there ought to be some relief for such a state of things by some system which would enable a public trustee to be capable of being appointed in such a case?—When he is appointed we can find him some work, I daresay, some of us.

Mr. *Kimber.*

1089. You never find any difficulty, in practice, in getting a new trustee, do you?—No.

*Chairman.*

1090. Is there any other suggestion that you have to offer?—There is one other suggestion with reference to the protection of trustees. Under the Settled Lands Act trustees are forced to invest the proceeds of sale and moneys which come into their hands in that way, on the security of the tenant for life practically; he investigates the title of mortgages, ascertains the value and decides the purchase or investment. I think that principle might be extended for the relief of trustees generally, and that more of the responsibility should be thrown on the tenant for life and less on the trustees.

*Chairman.*

1091. The tenant for life often has adverse interests as against the remainder-man, has he not?—It is in the Statute already, in the Act of 1882.

Mr. *Arthur O'Connor.*

1092. Would you extend that to a case where the tenant for life is a married woman?—Yes, I think so; there is no difference between a married woman and a single woman nowadays, so far as trusts are concerned.

Mr. *Kimber.*

1093. I forget whether you said, if not I will ask you whether you have found any difficulty in practice in obtaining the services of friends or connections to act as trustees?—I have not.

1094. If you would kindly read the evidence of Mr. Walters, that will save my asking you any further questions. You can have a print of it sent to you, and you might inform our chairman by letter, whether you assent to it?—If you please.

*Chairman.*

1095. Will you, however, be very careful to keep the document private, because these documents are meant to be private?—Certainly. Might I make one other suggestion?

1096. If you please?—I think that where a man dies intestate, and there is an administration, the people who are sureties for that administrator

*Chairman*—continued.

administrator should have some power to protect the funds. At present, where a man dies intestate, some relative or creditor takes out an administration to him, and he cannot do that without giving a bond to the judge of the Probate Court for due administration. The man who has signed that bond as surety has no means whatever of preventing the administrator wasting the funds. Some time ago there was a case I was acting in where the solicitor was foolishly under the impression that he could take care of himself by having the estate administered through his own office. He got the funds in his own hands, and the administrator got an Order, in spite of the fact that we proved to the judge that we had the strongest suspicion that he was going to make away with them. The judge made the Order and made the surety pay them over, although he remained responsible if the trustee should commit a breach of trust.

Mr. *Arthur O'Connor.*

1097. Have you ever known any difficulty about the appointment of an otherwise eligible surety, on account of the difficulty of justifying?—We do not have to justify. They are just waking up to the fact that everybody who calls himself a gentleman, is not responsible for 100,000*l.*; but until recently I believe you will find that nine-tenths of the sureties in the Probate Court were clerks to solicitors who describe themselves as of, say, "No. 25, Darlaston-road, gentleman."

Colonel *Howard Vincent.*

1098. You do not think that a public trustee would be any detriment to solicitors as a profession?—I should think it would increase our business myself: if he will distribute the business properly, of course.

1099. Are you aware that all these Bills provide for that?—I drew the clause or helped to do so. Our fear is lest the business should all go to Mr. Pemberton or Mr. Somebody, who is an official, instead of being distributed among the profession.

1100. But provided it was distributed among the profession, you do not think it would be any detriment to the profession?—I should expect that there would be more work rather than less.

*Monday*, 18*th March* 1895.

MEMBERS PRESENT:

Mr. Attorney General.
Dr. Farquharson.
Sir George Osborne Morgan.
Mr. Arthur O'Connor.
Sir Charles Pearson.
Colonel Howard Vincent.
Mr. Warmington.

MR. ATTORNEY GENERAL, IN THE CHAIR.

THE Chairman read the following letter:

"Administration of Trusts.

"9, New Square,
Lincoln's Inn, W.C.,
15 March 1895.

"Dear Sir,

"MR. Walters and I have read through the proof of the minutes of our evidence, and have made a few corrections in it. I understand Mr. Kimber wished that myself and Mr. Walters, after each had read the evidence of the other, should inform him whether there was any alteration or further suggestion we should like to make. I have discussed the matter with Mr. Walters, and he agrees with me in submitting to the Committee the suggestion that if there is to be a public trustee the most convenient person would be the Paymaster General, and that the persons through whom he should act or be approached should be the chief clerks of the Chancery Division in London, and the district registrars in the country. We think if this were done that it would simplify matters in every case in which the public trustee had to apply to the Court for directions or sanction, and therefore in such cases would diminish expense and delay, and that in cases in which no reference to the judge was necessary the public would have the advantage of having their trusts administered by persons who are thoroughly conversant with such business.

"I am,
"Yours faithfully,
"*John Hunter.*"

The Honourable Sir JULIUS VOGEL, K.C.M.G., called in; and Examined.

Colonel *Howard Vincent.*

1101. YOU were Prime Minister of New Zealand in 1870, I believe?—I was not Prime Minister then.

1102. You were in the Ministry?—Yes.

1103. Do you remember what office you held at that time?—I was Colonial Treasurer, Postmaster General, and Commissioner of Customs.

1104. And you introduced a Bill for the appointment of a public trustee, I believe?—Yes.

1105. The suggestion that you should do so was made to you on account of the difficulty of obtaining trustees, executors and administrators, and the uncertainty of their being able to act; is that so?—Yes, it was made to me by Mr. E. C. Stevens, a gentleman with a very large experience of dealing with property.

1106. The Bill was defeated, was it not, on the first occasion?—Yes, it fell through in the Upper House.

1107. Did it pass the House of Representatives?—Yes.

1108. But it was defeated in the Legislative Council?—Yes.

1109. Did you then re-introduce the Bill?—Yes, in 1872 I re-introduced the Bill.

1110. And did it pass into law on that occasion?—Yes.

Colonel *Howard Vincent*—continued.

1111. Has the office of public trustee in New Zealand been found a convenience to the public?—I should say there is no doubt of that.

1112. Has it proved a serious burden upon the finances of the colony, or has it paid its expenses?—It has fully paid its expenses; I should think it has rather led to an excess.

1113. It has fully paid its expenses, and the income is in excess of the expenditure?—On the whole it certainly has been, because some money has been paid into the Consolidated Revenue.

1114. Do you happen to remember, or are you able to produce any figures, to show what the cost to the colony was of the first establishment of the public trustee, in the earlier years?—I could hardly do that; it was an immaterial amount.

1115. But it was not a serious amount?—No, simply the salaries, that grew as more aid was required.

1116. But did it impose no serious burden upon the colony in the earlier years?—None whatever.

1117. You are not resident in New Zealand now, I think?—No.

1118. But you keep in constant touch with the colony?—Yes.

1119. And

Colonel *Howard Vincent*—continued.

1119. And with the public men in the colony?—Yes, I may say I do.

1120. And from the information in your possession do you learn that the Public Trust Office continues to be a very great success and convenience to the public?—Yes. I think, if you will allow me to give the history of it, that that would be, perhaps, more useful.

1121. Would you do so, if you please?—I first introduced the Bill in 1870. It was thrown out on second reading in the Legislative Council, the Upper House. The original suggestion of the measure was made to me by Mr. E. C. Stevens, a gentleman largely interested in the disposal of property. Its leading motives were the difficulty of obtaining trustees, executors, and administrators; the uncertainty of their being able to act in the case of their appointment by will at the time when the testator died; the frequent changes of trustees by death or incapacity, which involve large expenditure; the uncertainty of *cestuis que trustent* as to the state of the properties in which they are interested; the more or less frequent malversations which are discovered by minors on their coming of age, and who, expecting to receive large properties, find that scarcely anything is left; the saving of expenditure, and the better management consequent on continuous control; and other causes of an analogous nature. In 1872 I again introduced the Bill, and this time it passed into law, notwithstanding that it encountered considerable opposition. The institution found great favour, and continued to progress. Special trusts were assigned to the public trustee in relation to native lands. Nearly 20 years passed, when it was found desirable to appoint, in 1891, a Royal Commission to inquire into the working of the Department. It was found that in several particulars the management had become very faulty, and that there were some special causes of complaint. Besides that, experience had shown the necessity of making various alterations in the constitution of the Department, which by this time had become an extensive one. When the measure was originally introduced it was intimated that, as a result of experience, some revisions would in time be necessary. Notwithstanding that the Report of the Commission showed that there was considerable cause to complain of the management, no serious attempt was made to disparage the usefulness of the institution or to end its existence. It seemed to be considered that all the causes of complaint could be remedied by improved management and further legislation. A radical alteration was made by giving, under certain conditions, a Government guarantee. Last year a Consolidating Act was passed embodying all the previous legislation. I have brought this Act with me, and I have besides drawn up and shall be happy to leave with the Committee, if it is of any use to them, a *précis* of the Act which gives, as little as possible from a technical point of view, the nature of the legislation by which the institution is now governed (*handing in the same*). As regards the present business position and the nature of the inducements which the Trust Office offers, I cannot do



Colonel *Howard Vincent*—continued.

better than give you an account by the public trustee himself, which I have extracted from the official year book of New Zealand, published in 1894 (*handing in the same*). I also present the scale of charges (*handing in the same*). The system first adopted in 1891 of a common fund, with guarantee by the Government of principal and interest, is said to work satisfactorily. The rate of interest is fixed by Order in Council from time to time, but is not to exceed 5 per cent. on amounts up to 3,000*l.*, or 4 per cent. on any sums in excess of the first 3,000*l.* The office is remunerated for the Government guarantee it gives, by the excess of interest received over that paid away. As a considerable part of the investments are loans by way of mortgages on land (not exceeding one-half of the estimated value) there is probably a sufficient excess of interest received over that paid away. At the end of the year 1893 there were estates in the Public Trust Office amounting to 1,450,917*l.*, made up as follows:—

| | Number. | Value £. |
|---|---|---|
| Wills and Trusts | 371 | 543,238 |
| Intestate Estates | 886 | 84,436 |
| Unclaimed Realty | 117 | 23,465 |
| Lunatic Estates | 271 | 51,278 |
| Native Reserves | 102 | 348,500 |
| West Coast Settlement Reserves | 293 | 400,000 |
| | 2,040 | £1,450,917 |

The Public Trustee Department has been a great boon to the New Zealand community, besides that it has been of advantage to persons not residing in the colony. The losses and inconveniences sustained by the lax management discovered in 1891 were inconsiderable compared with the bulk of the transactions. I have here some notes about its effect upon the legal profession; I do not know whether it would be acceptable to the Committee to read them.

*Chairman.*

1122. If you please?—A section of the legal profession opposed the Act from the first, and I believe the profession as a whole has never been friendly to it. They alleged that there would be a difficulty in working it from a common centre. I think also they considered that under private management there would be more sympathy with the *cestuis que trustent*. I believe that in practice no difficulty has been found in either of these respects. The beneficiaries of property administered by the public trustee can obtain from the solicitors of the office, free of charge, all the information which he can afford respecting their interests. It is to be remembered also that testators are in no way compelled to employ the Public Trust Office. On the other hand, they can if they like submit drafts of their wills, and obtain from the trust officer a provisional consent to accept them, or suggestions as to any feature that may prevent the office from doing so. The question has been frequently asked, "Does the Trust Office lessen the income of the legal profession?" I am

*Chairman*—continued.

afraid there can be but one answer to this question. So far as is consistent with economy and good management the Department continues to employ the solicitors connected with the estates. Still, the income of the profession suffers; first, because the continuity of administration and trusteeship avoids the necessity of preparing new instruments and making new arrangements from time to time, and saves litigation; secondly, a great deal is done in the office, without charge, for which solicitors would expect substantial payment; thirdly, the public trustee can consult the Court and obtain orders at less cost than if the trusts were in private hands; and fourthly, it may be also that solicitors' charges are subjected to more severe scrutiny than is generally exercised in considering the cost of services rendered to the representatives of dead men. I am bound to say that we could never consider that the interests of a class should stand in the way of a benefit to the whole community. If such a principle were recognised, railways would not have been constructed, because of their competing with stage coaches; machinery would have been discouraged, because of its reducing the demand for labour; and certainly the land transfer system, which works so magnificently in the Colonies, would not have been adopted, because of its affecting the profits of the legal profession. In all these cases it is fair to remember that occupations and profits, impaired in one direction, are likely to be increased in another.

Colonel *Howard Vincent.*

1123. Is there anything else you would like to add to that statement?—I shall be very happy to answer any questions I can. I do not recollect anything; it seems to me to cover the ground pretty well.

1124. In 1872 you were Prime Minister, were you not?—Yes, from the early part of 1873. I was in the same position as I held in 1870 in the early part of 1872, when I re-introduced the Bill.

1125. How long have you been connected with the Government of New Zealand?—From 1869 to 1876, when I came home as Agent General; with the exception of six weeks; we were turned out of office for six weeks in 1872. I was also in office from 1884 to 1887.

1126. And you were Prime Minister for some time?—Yes; I was Prime Minister early in 1873 to 1876.

*Chairman.*

1127. Can you tell us whether this statute in New Zealand has checked the malversation of funds by trustees?—It is almost impossible to accurately answer the question, because, I suppose, not one case in ten becomes public. If a private individual is ruined he has to submit to it; he very often cannot go to law, and even if he can he seldom does. But there have been no malversations in the Public Trust Office, and it has taken a very large part of that sort of business; so I think the answer is in the affirmative.

1128. Does the Trust Office take all kinds of trusts?—No, they consider them, and determine whether they will do so. It is my impression that they do not carry on businesses.

*Chairman*—continued.

1129. Do they undertake for a limited time the management of estates; of landed estates, for example?—I think they take such trusts permanently; but there are circumstances under which they relinquish, if persons entitled are found who have not claimed at the time.

1130. Is it found to be a difficult thing to carry on the management of an estate from the Trust Office?—No; the machinery has been adjusted to the circumstances. Whatever difficulty there may have been at first is surmounted: to the best of my belief.

1131. Does the Trust Office now, after 20 years of experience, find the work easy and simple?—I should think it has got into a well-organised condition. The trustee, who was appointed in 1891, seems a very able man; and, of course, the public trustee must be a very strong man to make the office work well.

1132. In those cases in which discretion has to be used; for example, where there is a settlement, and provision has to be made for younger children, and so forth, how does the public trustee deal with cases of that kind?—If the amounts are small, and there is no other direction, the Statute authorises him to act with a certain amount of discretion; but when the amounts are large he applies to the Court for instruction and orders, and he is always subject to the orders of the Board, which is a very strong Board.

1133. Is the public trustee authorised to consult the relations and persons familiar with the family affairs?—Unquestionably, he is at liberty to do so; the thing could not work without.

1134. I observe that the scale of charges is rather high, is it not, I think you said 5 per cent. up to 3,000*l.*?—That is the rate of interest allowed on the common fund. I have hardly got the scale of charges in my mind; but I think the charges work out low on the whole. The charge for investing is, the first 1,000*l.* at 5 per cent., the next 3,000*l.* at 4 per cent., and the next 6,000*l.* at 3 per cent., and all over 10,000*l.* at 2 per cent.

1135. Is that on wills?—That is upon the gross proceeds of any testate estate, or of any trust estate realised by the public trustee.

1136. Is that an inclusive charge covering everything?—There are charges for certain things. If the guarantee of the Government is accepted, there is an exemption from general charges; and for orders of the Courts preparing deeds and so on, there is a scale, which, to the best of my belief, is a low one. I recollect fixing it myself.

1137. Do you find that there is in New Zealand complaint now as to the charge being unduly heavy?—I have not been in New Zealand for the last five or six years, and it is a question I can hardly answer. Judging by the public documents I should say that the thing works satisfactorily, and that the public have confidence in the Trust Office, as, indeed, they show by the amount of business that they do. Their having recourse to the Trust Office is purely voluntary, except in the case of intestate estates. Several estates from England have been put into the Trust Office.

*Chairman*—continued.

1138. Are you aware of any desire in New Zealand to put an end to the system, or do you think that the system is now fairly established?—I believe the legal profession would not be averse to putting an end to it; but I do not think that is a desire that finds any public utterance.

1139. Apart from persons who may be supposed to have interests in the other direction, is there any desire at all to put an end to the system in New Zealand, that you know of?—No, I think not; it is purely voluntary, and it costs the country no money; in fact, they have received considerable funds.

1140. Are these charges which you have spoken of the maximum charges; are they always inflicted?—They are the scheduled charges.

Mr. *Arthur O'Connor.*

1141. As I understand, you left New Zealand in 1876, did you not?—I was away for a time in 1876; but I was in office from 1883 to 1887. I left in 1888.

1142. Between 1888 and 1891 the condition of the Public Trustee Office was not altogether satisfactory, was it?—No, it was very unsatisfactory.

1143. They appointed a new officer in 1891, I think?—Yes.

1144. But you cannot speak from personal experience as to how the office has been going on since?—I have no personal knowledge, only from official sources.

1145. Supposing that a merchant or a manufacturer should die, would the official trustee continue the management of his business in order to sell it as a going concern?—I must give you this answer, with a reservation as to the best of my belief: If it is an intestate estate there are, of course, no instructions what to do, and the trustee will do the best he can, in the absence of any heir or person entitled, claiming the management. On the other hand, if it is a testate estate the board will very carefully consider whether they should accept the will or trust or administration; and my impression is that if it involves carrying on the business they would not do so.

1146. Even though the testator may have desired it?—Yes, even though the testator may have desired it; they are not bound to accept a will.

1147. Can you say what proportion of testators elect to use the official trustee?—They have a large number of wills in the office, some that are not accepted and some which have been provisionally accepted; but what proportion the men who have died bear to those who go to the trustee it is not possible for me to say.

1148. Would not that be a matter of interest to the official trustee himself, to know what proportion of testators made use of his office?—It might after a time, but the time is hardly long enough. Presumably a great many of the people who have died during the last 20 years knew nothing at all of the Trust Office, and had no knowledge of its working.

1149. The figures which you have given, of 5, and 3, and 2 per cent., relate only to the realisation of assets, I think?—That is the charge for the realisation of the gross assets upon testate estates and trust estates.

Mr. *Arthur O'Connor*—continued.

1150. Do you make a separate charge for investments?—I believe not, if they accept the guarantee of the Government; the guarantee of the Government is net.

1151. I see in a paper which has been put before us that "the charges for investing money are: For every transaction, 10*s.* per cent."?—I find a note in the scale of charges that "this does not apply to the interest derived from money in the common fund. Such interest is paid clear of all charges of the Public Trust Office."

1152. Not interest; but for investment there is a charge of 10*s.* per cent.?—I see the same note here: "For investment of money. On every single investment, 10*s.* per cent. [*Note.*—On money which falls into the common fund for investment no charge is made for the investment.]"

1153. But for other investments you charge 10*s.* per cent.?—That seems to be the charge.

1154. So that if a man left 100,000*l.* in cash, and it had to be invested, for that alone you would charge a 500*l.* fee?—Yes, if a man left it in cash; but the probability is that he would leave it in investments; the other would be a very rare case; people do not keep such balances as that at their bankers, in New Zealand.

1155. What is the relation of the public trustee to the Courts?—He has access to them. It appears, judging by the Act (Section 28), that to some extent he has readier access than other trustees, and a solicitor is attached to the office. In some cases of small funds he is allowed to act on his own discretion without consulting the Courts, but only on small amounts.

1156. Does he have to pay fees or charges of any kind for applications made to the Court?—Presumably he does, because I see that there is one item which is: "For any applications to the Court relating to any property in the Trust Office other than for the granting of probate or administration where the public trustee or the office solicitor moves in person, 2*l.*: Provided that in any matter of minor importance, or in a small estate, this fee may be reduced to any sum not less one pound." Of course, that is very much less than employing a Queen's Counsel to go before the Court.

1157. In the case of special applications to the Court by the official trustee would the costs fall upon the general fund, or would it fall upon the particular estate?—It would fall upon the particular estate.

Sir *Charles Pearson.*

1158. I observe that you use the expression "the Board"; has the public trustee an advisory board?—Yes.

1159. Is that in the Statute?—Yes. Sections 9 and 10 provide that there shall be a Public Trust Office Board, consisting of the Colonial Treasurer, the native Minister, the Solicitor General, the Government Insurance Commissioner, the Commissioner of Taxes, the Surveyor General, and the public trustee.

1160. How many of those are responsible members of the Ministry for the time?—The Colonial Treasurer is a responsible minister, and

Sir *Charles Pearson*—continued.

so is the native Minister. The Solicitor General for a long while has not been in the Government; the Government Insurance Commissioner is a Civil Service officer; the Commissioner of Taxes and the Surveyor General are also not in the Ministry. Nor is the public trustee.

1161. Then what is the relation of that board to the Government of the day, or to the Houses of Parliament?—They have statutable duties to perform. I do not know that there are any other relations. They give their advice and instructions to the public trustee.

1162. Does the public trustee make a report of his Department every year, which is laid before the Legislature?—Something in the shape of a report; he lays the accounts before the Legislature; at least, before the Auditor General; and the Auditor General places them before the House with his remarks.

1163. In saying that the public trustee has, in some cases, readier access to the courts of law than a private trustee, to what do you refer?—Well, of course, Wellington is a small place, and I take it he steps across when he has occasion to do so, and sees the judge in chambers. It must be much less costly than if a man has to instruct both counsel and solicitor.

1164. He has practically the privilege of interviewing the judge in chambers personally, has he?—I can only say that is my impression; but there is no statutory authority of that kind.

1165. Of course, no private trustee would venture to take that upon himself?—A private trustee has to wade through gold before he can determine; if he has anything out of the common to consider.

1166. In short, a private trustee has not a right of audience of a judge either in private or public; but the public trustee has to a certain extent?—I believe a judge hears personal applications; but they are very seldom effective; the judge tells them to get counsel. No doubt he would not refuse to receive a private trustee; but whether a private trustee would do any good by an audience I cannot say.

1167. Have you ever known a case where a private trustee had a right of audience of the judge either in a public court or in chambers?—No; my impression is that a private trustee would through a solicitor instruct counsel to act for him. As regards the right of the trustee I should prefer to trust to the exact words of the Statute.

1168. Can you tell the Committee to what cases you referred when you said that the public trustee was occasionally, I think, in small cases where small amounts were at stake, entitled to act on his own discretion?—Section 15 provides that in certain cases the public trustee may administer any intestate estate, the value of which does not exceed 250*l.*, without grant of administration. Section 45 allows the Public Trustee to make payments which require an Order of Court without such Order, if the amount does not exceed 50*l.*

1169. That is, of course, a privilege which no private trustee could obtain?—That is in intestate estates. I understand the public trustee may take possession of any estate, pending grant of probate or administration; but it is his duty to inform anybody who he may think has any interest

Sir *Charles Pearson*—continued.

in the estate of his doing so, and he has no right of dealing with the estate beyond the sale of any personal perishable property. Then if within three months the person who is entitled does not take action to obtain administration, or does not show cause why a further delay is necessary, the public trustee may apply for probate or administration.

1170. But in such cases he is by statute entitled to act upon his own discretion in matters in which a private administrator or trustee would not be?—To a very limited extent only. I suppose, for example, he would be entitled to sell a lot of fruit, if there were such amongst the property, before it become bad. Whether a private executor before administration is granted would be justified in doing so I cannot say.

1171. Then I want to put this further question. In such a case is the action of the public trustee upon his discretion unchallengeable afterwards?—Section 19 provides for the validation of Acts done by the public trustee when acting under probate or arbitration granted in error. I should think that generally he is indemnified. Personally he is not liable for anything but fraud or crime; but the Trust Office, the Government, in fact, are liable for anything that a private trustee would be liable for; only, unless there is fraud or crime, neither the public trustee nor his officers will be personally liable. Sections 21 to 26 provide for dealing with the estates of small amounts for the benefit of widows and infants, for distributing to widows the residue of intestate estates, and so on.

1172. No doubt we shall get anything more from the Statute itself?—Yes, I have left you the Statute.

1173. Could you furnish us with a copy of the Report of the Royal Commission of 1891, on which the recent legislation proceeded?—It is a very bulky document; but I shall have much pleasure in placing it at the disposal of the Committee. The agent general has been good enough to let me have a copy, but it was too bulky to bring it with me; I will send it to the clerk of the Committee.

1174. My desire was either to see from the report or to ascertain from yourself in a general way the nature of the faults which have been found with the administration; but if the Report of the Royal Commission discloses that we shall not need to trouble you with it?—The Report of the Royal Commission goes through a great number of cases, and the Report is printed with the evidence attached; and that would be much more satisfactory to you than anything I could say.

1175. Can you tell me what elements decide the public trustee in determining whether he will accept or decline a trust?—I have never been on the Board myself; in my time the Colonial Treasurer was not on the Board. The public trustee has to act under the instructions of the Board, and I cannot give you a precise answer except from my own impression. The question entirely depends upon whether the estate is one which he can competently manage.

1176. Could you give me any instance of a trust which the Board would be likely to decline. Would it be such a trust as the carrying on of a going

Sir *Charles Pearson*—continued.

going business?—That is my impression; I will not speak with certainty, but that is my strong impression: that an estate which included the carrying on a business would be declined. I am not sure that that would apply to the management of sheep stations; but to a trading business it would.

1177. To a trading business, but not necessarily to the management of sheep stations?—Yes, that is my impression.

1178. The latter class of business they might accept?—I think so, but I cannot speak with any certainty. Of course, if they have a right to realise; they might take over a business if they were authorised to sell it at once.

1179. Am I right in supposing that the public trustee is not imposed on any estate or testator, but that it is entirely optional in the testator to invoke his interference?—Entirely.

1180. How does that stand as regards intestate estates; the option then lies with the board, does it not?—Only to take immediate possession; but it is their duty to find out who is the next of kin, or who is entitled to the estate, and to give that person an opportunity of applying to the Court.

Sir *George Osborne Morgan.*

1181. I believe that the population of the colony of New Zealand is about 600,000, is it not?—About 650,000.

1182. Have you ever considered how far a system like this, which would work well in a comparatively small community, would work if it was extended to a country like England, with a population, I suppose, 50 times as great?—Yes, I have thought it over very frequently.

1183. What conclusion have you come to?—The conclusion that I have come to is that, as taking estates is purely voluntary, the business would be very badly managed if more was undertaken than could be satisfactorily got through.

1184. You are aware, no doubt, that the colonial land transfer system, which, as you say, has worked so admirably in the colonies, has not worked quite so well in this country?—It has never been tried here to my knowledge. Of course, the cases are widely different. In the colony these laws were passed at an early date when most of the land belonged to the Crown, and the land title was immediately made subject to the Transfer Act. Here you would have to go back a great many years.

1185. I only throw that out as a case of an analogous kind?—I beg your pardon; I did not instance it as an analogous case, only so far as, that if the question of the profits of the legal profession were to be the paramount consideration, then those Acts would not have come into operation.

1186. Did I correctly understand you to say, in answer to my honourable and learned friend, that in New Zealand in the case of intestates' estates, the estate is necessarily vested, at least for a time, in the public trustee and administrator?—No, not necessarily. It is his duty to try to find some one interested, and to ask him to take action. If he will not take action then the public trustee temporarily occupies the position, and within three months the person entitled must either give a reason for taking action or must take action.

Sir *George Osborne Morgan*—continued.

1187. And that is the extent of his interference with intestates' estates; is that so?—Yes. He is entitled by right on application failing the application of some one entitled by kinship.

Mr. *Warmington.*

1188. The public trustee does take, by virtue of his office, the administration of all lunatic estates, does he not?—I think he does now.

1189. And with regard to private trusts, they can be classified thus: those which have the security of the common fund, and those that have not. Those that have the security of the common fund have all the administration work done free of expense, except realisation, I think?—I am not very familiar with the legal charges. It seems to me that there may be still some charges for drawing out documents, but not for investments.

1190. And the public trustee in those cases gets the profit, namely, the difference between what the Government pay out of the common fund as interest and what it receives from the investments?—Yes.

1191. The capital fund is paid over intact when the persons become entitled to it?—Yes.

1192. With regard to those cases which have not the security of the common fund, the income actually realised from the investments by the public trustee is the income that is paid over, less the charge?—Yes, but without the guarantee against losses.

1193. What is the interest which the Government of New Zealand pays out of the common fund when the security of that common fund is accepted?—I speak with some reservation, but I believe it pays at present the maximum, that is, five per cent. on amounts up to 3,000*l.*, and four per cent. over that amount.

1194. Is it not a fact that certain sums come through your hands from the colony to persons in England, and that you distribute them in your office?—You mean from the Trust Office?

1195. Yes?—Yes, the agent general makes the payments in England; but if the payments have to be made to persons resident in and subjects of foreign countries the Act entitles the money to be paid to the foreign consuls, and makes their receipts good.

1196. Only one other question: where there is an intestate estate, and application is made that the public trustee should accept it, which, for reasons, he declines to do, what then happens; is an application to the Court for the appointment of private trustees made?—I cannot say. It is beyond the ken of the public trustee. If he refuse to accept the estate he knows nothing more about it.

Sir WESTBY PERCEVAL, K.C.M.G., called in; and Examined.

*Chairman.*

1197. You are Agent General for New Zealand?—I am.

1198. We want to ask you some questions, if you will kindly assist us, in regard to the Public Trust Office in New Zealand; we have heard from Sir Julius Vogel the history of that office, how it began in the year 1872; have you had brought to your knowledge anything in connection with its working?—Only in a general way. I am a member of the legal profession, and I was in practice for some years in the colony, so that, in a general way, I was cognizant of what was going on.

1199. The office of public trustee has been in existence now upwards of 20 years?—Yes.

1200. What should you say; has it given satisfaction as a principle?—At the present time I should say it is growing very much in popular estimation. Since the inquiry in, I think, 1891, when certain irregularities were complained of, and a Commission reported, after which the colony guaranteed the common fund, the popularity of the institution has increased very much.

1201. Prior to that you say there were some irregularities disclosed as having taken place?—Yes. The Report of that Commission showed certain irregularities, chiefly with regard to the system of book-keeping and the disposal of trinkets and jewellery, and perishable goods, of that sort. It was found that the clerks in the office had been in the habit of buying some of them. The irregularities complained of were not to my mind of a serious character; but they were, of course, grave from the point of view of a trustee.

1202. But they were irregularities arising from improper administration?—Yes, irregularities arising from improper administration.

1203. And steps were taken, I presume, to rectify those errors of management at once?—Certainly.

1204. And now you think that the office has been growing in popularity?—Very much so, I should say. It takes, of course, a long time for an institution of the kind to become widely known and to get into proper working order.

1205. Is the charge that is made complained of as being oppressive or excessive?—I have never heard the charges complained of; but I am bound to say that they appear to me to be somewhat high. But there is a reservation upon those charges that I think Sir Julius Vogel did not draw attention to, and that is, that where the estates consist of deposits, loose money, or anything which is readily collected or realised, the charges are reduced to half.

1206. Are those charges inclusive in the case of realisation; that is to say, do they include legal commission or legal expenses?—I am bound to say that I think the schedule of charges is not very clearly expressed; and I should not like to express a definite opinion upon that head. I think they ought to be inclusive charges.

1207. We learn that, financially, the Trust Office has not only not cost money, but has been, in a modified sense, a source of revenue?—I do not see how it can have been a source of revenue, because none of the profits made by the Trust Office go into the public account.

*Chairman*—continued.

1208. At all events, financially, it has not been a burden upon the community?—Speaking generally, no; but I noticed that in the last financial statement there was a small vote of 2,000*l.* or 3,000*l.* to recoup the Public Trust Office for some loss on investments. But, speaking generally, it has been no charge upon the revenue of the colony.

1209. I presume that the larger the sums of money which were held by the public trustee, the smaller, *pro ratâ*, would be the expense?—Certainly, I think so.

1210. And I suppose there might be possibly a reduction of the charges if the public availed themselves largely of the opportunities offered?—Yes; of course these charges are always subject to revision.

1211. We have been told that the Public Trustee Office is purely optional in New Zealand; that is, practically, with the exception of lunatic estates, for example, and some other cases of intestacy; that in the main it is optional on the part of any persons to avail themselves of it?—Yes, but I do not think it is compulsory even in the case of lunatic estates. I think it is quite open to anybody to apply to the Court for an independent committee in lunacy.

1212. And also on the side of the public trustee in general, it is optional on his part to accept or reject a trust, we understand?—Yes, unless, I suppose, in the cases of intestate estates; and it is in these small intestate estates that I think the public trustee has done such useful work.

1213. I was just going to ask you about the classes of estates, and specially with reference to small estates; but, in the first place they take not only trusteeship under settlements, for example, but under wills also, and under intestacies?—Yes.

1214. Or in the case of lunatics?—Yes.

1215. In fact, I presume there is no limit to the character of trusts that they may take if they like?—No, the trustee has a wide discretion.

1216. Of course, in practice, the limit depends upon the manner in which the discretion is exercised?—Quite so. The public trustee has issued certain indications of the class of trusts that he would accept.

1217. Can you favour us with a copy of that document?—I shall be happy to do so. I have a list of regulations here issued by the trustee, which provide that trusts of any kind, and executorships, as to any fund, cannot be taken over except on one condition, namely, that the provisions in the deed, will, or instrument allow of an investment of the capital fund in first mortgages in the colony, or in the stocks, funds, debentures or securities of any British colony, or according to the Public Trust Office Acts. So that

*Chairman*—continued.

that unless the will or instrument gives the trustee power to invest in those securities he probably would not accept the trust.

1218. That is the limitation. Having regard to the character of the powers of investments contained in the instrument creating the trust?—Yes, that is the limitation. He would not undertake a trust, I take it, under which his powers were not general.

1219. Is there any limitation having relation of the character of the duties imposed by the trust, whether discretionary, for example, or otherwise?—Only the limitations in the Statute, I think. He has statutory powers which are wider than those of an ordinary trustee.

1220. Does the public trust in general accept trusts where there is a good deal of discretionary work imposed upon the trustee? — Probably not. I think the Trust Office would not accept a trust where the trusts were at all complicated, or which were calculated to involve him in repeated applications to the Court for direction and so on.

Sir *George Osborne Morgan.*

1221. Such as a trust to carry on a trading business or manufacturing business?—He certainly, I think, would not undertake a trust of that kind except, possibly, in a particular case for the purpose of immediate realisation.

*Chairman.*

1222. And in the case of real estates involving the managing of the estate, would he undertake that?—I should think not; but, of course, each case would have to be dealt with as it arose. And the practice is for people to send in their wills to be provisionally accepted, so that that is a safeguard and a guide to testators as to what trust will be accepted.

1223. In practice, has there been any real difficulty in selecting what sort of trusts will be accepted, and what sort of trusts will not be accepted?—I do not think so. It is the practice for wills to be sent in for provisional acceptance by the trustee; but, speaking generally, I think it may be said that he accepts the ordinary trusts of a will, but will not accept any complicated trust or any trust which involves the carrying on of a business.

1224. Does any difficulty arise by reason of the public trustee not being familiar with the family affairs or the private affairs of the deceased, or the *cestui que* trust, as the case may be?—I think not; he is generally in as good a position to consult the wishes of the beneficiaries as is any ordinary trustee.

1225. I observe that from 1890 to 1893 there has been a considerable increase in the number and also in the value of wills and trusts which have been consigned to the care of the public trustees; they have increased from 288 in number to 371, with a corresponding increase in value of from 418,000*l.* to 543,000?—Yes.

1226. The population, we know, of New Zealand is between 600,000 and 700,000 persons?—About 750,000 persons.

1227. Do you know what is the value of the death duties; I do not know whether you have any death duties in New Zealand?—We have



*Chairman*—continued.

death duties, but I have not the figures at hand enabling me to state the annual amount received from death duties.

Sir *George Osborne Morgan.*

1228. The death-rate of New Zealand is the lowest death-rate in the world, is it not?—Certainly it is the lowest death-rate, and probably the highest death duty.

*Chairman.*

1229. But you do not happen to have the figures before you?—No, but I could furnish the secretary with any figures he likes to ask for.

1230. If you could tell us what were the values of the estates passing on death, that is to say, belonging to persons who died and coming within the death duty, so as to enable us to compare them with the value of the estates which have come into the hands of the public trustee, we should be very much obliged to you?—Of course, it is only a very small proportion that comes into the hands of the public trustee, a very small percentage of the total.

1231. Do larger estates find their way much into the hands of the public trustee?—Hitherto they have not done so; but I understand that the tendency is more in that direction than it was.

1232. In the case of small estates, do they largely come into the hands of the public trustee?—If you mean other than intestate estates, I think there is a very growing tendency to give small estates to the public trustee; in fact, all estates.

1233. You said something to the effect that the benefits of the office were appreciated, and were valuable in the case of small estates?—Yes, especially intestate estates.

1234. If there is anything that you would like to tell us about that, we should be interested to hear it, about the effect of this institution upon small estates?—I think that the cost of administering a small estate by a public trustee is very much less than the cost of administration by an administrator, and the powers of the public trustee are wider than the powers of an ordinary trustee.

1235. What is the reason of that, do you think?—In a small estate, under 250*l.*, the public trustee need not apply to the court for letters of administration; he can administer on simply electing to accept the estate; so that there is a saving of the cost there of an application to the court. Then the solicitor's fees on small estates are very low, so that in small estates I should say the cost of administration was certainly considerably less.

1236. I gather from a comparison of the figures that in the case of wills and trusts which come into the hands of the public trustee the average value of the estate is between 1,400*l.* and 1,500*l.*?—It would appear so.

1237. And in the case of intestate estates the average is about 90*l.* each?—Possibly.

1238. That would indicate, I suppose, the particular class of benefit that is desired?—Yes; and the reason the average is so low is probably this: that in the case of every man who is found dead, any property on him at all is an estate, and goes into the hands of the public trustee.

*Chairman*—continued.

These are cases where I think the public trustee has been a great advantage.

1239. What is the minimum limit below which any such property would not be treated as an intestate estate at all?—I suppose there is a limit; but if the property had a value, however low it might be, I suppose the public trustee would administer it.

1240. A gold watch, for instance, if found upon a deceased person?—That would be treated as an intestate estate.

1241. However, the real test, I suppose, of this office is the esteem in which it is held in the community. Do you think this power of dealing with these small estates is highly esteemed in New Zealand?—Undoubtedly, I think it is.

1242. Was there much complaint, before the public trustee was appointed, of malversation of trust funds?—No, I think not. I do not think that the average of such malversations was higher in the colony than here.

1243. I did not mean to suggest that it was?—There were no special circumstances leading up to it, I think.

1244. The Bill was not introduced by reason of some great scandal?—Certainly not.

1245. But it was as a matter of deliberate policy?—Yes.

1246. It is very difficult perhaps to conjecture, but should you think that the existence of this office would be beneficial in checking the opportunities for malversation?—Of course it cannot affect any other estates than those which are within the Public Trust Office.

1247. But in those cases where there is no really reliable person available to a private testator or to a private settlor, do you think it would have any such effect?—The facilities for transferring trusts from individual trustees to a Public Trustee Office, I should say, would tend to keep the trust estate out of the hands of strangers who have no interest in the family, and would in this way possibly prevent defalcation.

1248. Have you considered at all whether a similar institution could with advantage be applied to this country?—I should say that it could be applied with great advantage.

1249. Of course one knows that the scale of operations, at present at all events, is much smaller in New Zealand than it would be here?—Undoubtedly.

1250. But do you see any difficulty in having provincial offices, and of course a much larger staff to deal with the very much larger sums of money that might come in?—No, I see no great difficulties on that head. The public trustee in the colony has to have a number of officials in different provinces of the colony. Prabably the volume of business during the first few years would be small in this country.

Mr. *Arthur O'Connor.*

1251. I suppose breach of trust was not absolutely unknown in New Zealand before the establishment of this office?—No, certainly not.

1252. But there was not any very great complaint about the number?—No, I do not think we were conspicuous.

Mr. *Arthur O'Connor*—continued.

1253. I suppose breach of trust by trustees is not unknown in New Zealand even now?—Certainly not.

1254. Is there anything by which we could judge whether as a matter of fact this office has in any appreciable degree diminished the number or proportion of breaches of trust?—I could not give any evidence as to that.

1255. It must be a matter of pure speculation?—Yes, of pure speculation.

1256. At any rate, the circumstances are not so clear as to make the fact obvious that the establishment of the office has diminished the proportion of breaches of trust?—No, except that the mere fact, perhaps, of the existence of the office would enable beneficiaries or one of two or more co-trustees who were dissatisfied with the way in which things were being administered, to bring pressure to bear to have the estate removed into the Public Trust Office.

1257. But I understand that as a matter of fact only a very small proportion of the estates have been put into the Public Trust Office?—Yes, a very small proportion, so far.

1258. And those mostly of a smaller kind?—Yes.

1259. And cases in which the expenses of administration would probably be higher in proportion to the total value than they would be in larger estates?—Yes; but I should think that a large number of persons have now made their wills appointing the public trustee as trustee; so that we cannot really judge for some years yet as to the opinion that is held with regard to the Public Trust Office.

1260. Where does the pay of the public trustee come from; does it figure in the Estimates?—Yes, I think it appears in the Estimates; but there is the other side, the profits of the office.

1261. Now with regard to that, I see that the value of estates in his hands has apparently increased during the last few years, a little at any rate; but a statement has been put before us which shows that of that value more than half is made up of two sums, one, 348,500*l.*, on account of Native Reserves, and another of 400,000*l.* of West Coast Settlement Reserve. I do not know whether you have seen these figures (*handing a paper to the Witness*)?—Yes. Those are trusts which the public trustee is administering.

1262. Those are land reservations, as I understand?—Yes.

1263. Does that at all suggest to you that the charge for the salary of the public trustee must be independent, to a certain extent at any rate, of the trust funds that he administers under wills and settlements and intestacies, that at any rate part of the salary of this public officer must be furnished from sources other than the private trusts which he administers?—But those are *quasi* private trusts; they are for the benefit of beneficiaries large or small.

1264. You mean the Native Reserves?—Yes.

1265. And the West Coast Settlement Reserves?—Yes.

1266. Would you kindly tell us what they mean?—They are reserves made for the benefit of the loyal natives.

1267. Do

Mr. *Arthur O'Connor*—continued.

1267. Do any private white persons claim proprietary rights in those reserves?—I think not.

1268. So that it is distinct from the administration of estates?—That is a distinct trust.

1269. And those figures connected with the reserves form more than half of the value of the property with which this official is intrusted?—That is an extract, and I have no means of checking those figures.

1270. Unfortunately we have not either?—I have here the Annual Return of the Accounts of the Public Trust Office, and receipts for the year from the West Coast Settlement Reserves is a very small amount, only 2,000*l.* or 3,000*l.* (*Handing in the same.*)

1271. I notice that the figures given are, for 1890, 349,462*l.*; for 1891, 350,289*l.*; for December 1892, 350,853*l.*; and for December 1893, 400,000*l.*?—I take that to be the estimated value of the Reserves.

1272. But at any rate this is an official who is concerned with properties and trusts altogether independent of trusts under wills, settlements, or intestate estates, or lunatic estates?—Yes, but those trusts were created either by statute or by some testamentary disposition.

1273. Then his salary is provided for out of resources other than those which come exclusively from settlements or wills, or intestate estates?—Yes, if you exclude those from the category of estates.

1274. Then, besides the charge for the official salary there are the fees on the estates themselves; and, as I gather from what you have already told us, there has been a charge upon the Estimates to make good defalcations to the extent of 3,000*l.*?—Not for defalcations, but for losses on realisation.

1275. That would, in the case of private trusts, be defalcations?—No, loss on investments.

Mr. *Warmington.*

1276. That means that the investments have fallen in price, or that a mortgage was lost?—It means there was a loss in realising the investment.

Mr. *Arthur O'Connor.*

1277. At any rate it constituted a public charge?—Yes, to that extent.

Sir *Charles Pearson.*

1278. Is there any provision for the public trustee acting jointly with a private trustee, if he is so appointed in the will?—No, I take it he must be sole trustee.

1279. Have the courts any power, so far as you know, to transfer an estate to the public trustee on complaint by the beneficiaries against the private trustee?—Certainly they have.

1280. That would be found in the statute, I suppose?—I think so. You mean where the beneficiaries wish it and the trustees oppose it.

1281. I assume that the trustees are not willing to resign the trust?—I think the court certainly has power in that case to order a transfer of the trust to the public trustee, just as the court would have power in a case of that kind to remove trustees and to appoint others.

Sir *Charles Pearson*—continued.

1282. Or to appoint new trustees?—Yes.

1283. In such a case they would have power to appoint the public trustee as the new trustee?—Yes.

1284. I presume that these Native Reserves and West Coast Settlement Reserves are distinctly, in their origin, public trusts, and could never have come into the hands of private trustees; is not that so?—Yes, I think that is so. Probably the existence of the public trustee suggested his being the trustee to administer them.

1285. Are you able to tell us how the Native Reserves, for example, were managed before the office of public trustee was invented; whether it was by a department of the Government answering to our Commissioners of Woods and Forests?—I cannot tell you that. There were very few Reserves before 1872, very few indeed.

1286. Probably then, they were put in trust mainly since the existence of the public trustee; and, therefore, the distinction has not arisen?—Yes. No doubt there were some before, but I forget how they were administered.

1287. I observe that, with the exception of the reserves and lunatic estates, nearly the whole of the estates administered by the public trustee are trusts arising on the death?—Yes.

1288. Is it competent to place under his office, if he is willing to accept them, what are known as *inter vivos* trusts; for example, a trust for a charitable purpose during the lifetime of the donor?—Certainly; I should say that he would accept a trust of that character.

1289. There is no category in the table before us answering to that, if it is so. Can you tell us whether there are instances of that, and if so, whether they bulk largely?—I should think that is a class of trust which would be very naturally put into the hands of the public trustee, and which he would be very willing to accept.

1290. Has he anything at all to do with the management of insolvent estates or embarrassed estates?—Bankrupt estates, do you mean?

1291. Short of bankruptcy?—If an intestate estate was bankrupt I presume he would have to administer it.

1292. But not the estates of a living man in which his creditors were mainly interested; he has no connection, I mean, with the Bankruptcy Department?—None whatever.

1293. Have you sufficiently detailed to us the classes of cases covered by the regulations which you say were issued as to the kind of trusts which the public trustee would be unwilling to accept, or would you have any objection to hand us in the regulations?—I am afraid that they are not very explicit, but you will see that under the first two there are some general words which limit the class of trusts (*handing the same to the honourable Member*).

1294. Is it sufficiently authentic to enable the Committee to proceed upon it as suggestions issued by the public trustee?—It comes from the public trustee.

*Chairman.*

1295. Is that document authoritative?—Yes.

1296. If you will enable us to have a copy of it we shall be obliged to you?—Yes, I shall be pleased to do that. You were asking Sir Julius Vogel with regard to private applications to judges in chambers. I think Sir Julius is quite wrong in that respect. I don't think the public trustee would ever consult a judge in connection with a trust, except in the ordinary way.

Sir *George Osborne Morgan.*

1297. In the ordinary way in which a private trustee can apply in England for the direction of the judge, I suppose?—Yes, quite so.

1298. With regard to these Native Reserves, I suppose by Native Reserves are meant the lands which are reserved in the North Islands for the Maories?—Yes, chiefly.

1299. May I ask you how these Native Reserves, which seem to me to be exceedingly valuable, got into the hands of the public trustee; could you throw any light upon that?—It is obvious that they must be put into the hands of somebody to administer. I do not know why the public trustee was selected; it seems to me he is a very proper person to administer them; but I cannot give you any other reason than that.

1300. There is a minister, is there not, who deals with native affairs?—Yes, the Native Minister.

1301. Can you tell us what is meant by the West Coast Settlement Reserves, which also seem very valuable?—They are Reserves set apart out of lands confiscated from the natives for the benefit of those Maoris who remained loyal to the Crown.

1302. I understood you to say that when the public trustee acts at all, he acts entirely alone and not in conjunction with any co-trustees?—No, entirely alone.

1303. Could you tell us what is the salary of the public trustee in New Zealand?—It is not a large salary; it is not more than 1,000*l.* a year, I think.

1304. And what are the general expenses of the office, taken altogether?—The expenses are given here in an abstract. There is a table showing the investments and the expenses during last six years.

1305. Could you state, shortly, what is the average cost of the office?—The expenses for 1893 were 13,417*l.*, and the number of staff 27; the ratio of expense to the total being 2·18.

1306. I think you said that the percentage of 5 per cent. struck you as rather a high charge?—Yes; unless it is an inclusive charge it seems to me somewhat high.

1307. I suppose it was necessary to make it somewhat high in order to make the office pay its way; would not that be so?—No; I presume it was considered to be the fair charge; but it seems to me high.

1308. But the general revenues of the colony, did I correctly understand you to say, derived no benefit from any profit made by this trusts administration?—No.

1309. Then what becomes of any surplus profits that may be made in it?—I take it that they would be used to build up a fund to make good any losses on the guarantee on the common fund.

Sir *George Osborne Morgan*—continued.

1310. It goes back, in fact, to the office?—Yes.

1311. Can you tell me whether the office is still unpopular with the legal profession in the colony?—I do not think so.

1312. I suppose that the loss as regards small intestates' estates to the legal profession is practically nothing?—Practically nothing; the volume of business hitherto done by the Public Trusts Office is not sufficiently large to excite the hostility of the profession.

Mr. *Warmington.*

1313. I should like to ask you, as a lawyer, is there any difference between the law as administered in New Zealand and as administered here, with regard to the liability of trustees?—Speaking generally, I think not; I think that our Trustees Relief Acts are practically the same as the English Acts.

1314. Is it a usual thing for a testator to make a will which contains trusts which may last for a number of years?—Yes; perhaps not so general as it is here, but those cases exist.

1315. Apart from wills, on the marriage of children, is it a common thing in New Zealand for a trust to be created?—Yes.

1316. It is the fact, is it not, that with regard to wills a man in the colony may go to the office and inform the public trustee of the will he has just executed or is about to execute, and ask him then whether he will, in the case of his death, accept the trust created by that will?—Yes.

1317. And, as a matter of fact, there have been numerous applications of that kind, especially since 1891, I think?—So I am informed.

1318. And that practice is a growing one?—That is my opinion.

1319. Those estates, of course, cannot figure in the present returns?—No.

1320. Can you tell me when the returns for 1894 will be available?—I am afraid not until towards the end of the year, July, August, or September.

1321. Can you tell the Committee what number of wills of persons still living (of course not divulging names) have been produced to the public trustee, and accepted by him?—I could not tell that.

1322. Could that information be obtained?—I think not; it could only be obtained by application to the public trustee, and I doubt whether he would consider that he ought to give the information.

1323. I suppose you would consider that to be as cogent a proof of public esteem as there could be?—Certainly.

Dr. *Farquharson.*

1324. I suppose you were not in New Zealand, before the public trustee was appointed?—Before 1872, do you mean?

1325. Yes?—I was.

1326. But not in an active position?—No.

1327. But you know, of course, the history of it.

Dr. *Farquharson*—continued.

it. It is the fact, is it not, that the first attempt to pass the Bill failed?—Yes.

1328. What was the reason of that; was it on account of public opinion going the other way?—It was owing to an obstructive Upper House, I believe.

1329. And it went through without difficulty the second time?—Yes.

1330. I think you told us that the desire for the public trustee was not on account of defalcations, but on account of the disinclination of private people to act as trustees, executors, and so forth?—Yes.

1331. The law being the same there as here, do your judges take a very strict or stiff view of the responsibility of a private trustee?—No, certainly not any stricter than here; the same principles guide the judge; we have practically the same law.

1332. It has been suggested in this room that the principles that guide the judges here are rather severe to private trustees; that is on very high authority; are you disposed to take that opinion?—The judges have to administer the law, which is practically the same in the colonies as here. The decisions of English courts are followed in the colonial courts.

*Chairman.*

1333. Except in so far as you alter it by Statute, you deal with the common law of England?—Yes.

1334. And the equity law too?—Yes.

Dr. *Farquharson.*

1335. Is it the fact that there is in New Zealand real and serious difficulty in persuading private people to act as trustees?—I do not know that there is greater difficulty there than there is here; but I think it is always a matter of difficulty. And a difficulty which is felt everywhere is that the people whom you select to act for you as trustees probably continue to act a very short time only, and the estate gets into the hands of strangers very soon.

Dr. *Farquharson*—continued.

1336. Then I take it that the appointment of a public trustee in New Zealand has been successful and satisfactory?—I think it has been very successful and performed very useful work, and is certainly growing in the public estimation.

1337. Has there been any proposal ever made to make the office of public trustee compulsory?—Do you mean by that to make the public trustee administer all wills?

1338. To make him a compulsory official?—Certainly not.

1339. I ask the question because great objection has been taken to the proposal to create a public trustee here, from the fear that eventually the demand will become overwhelming to make him a compulsory official; you have not heard that?—It has never been suggested that the liberty of the testator should be curtailed in any way; that has never been advocated in the colony.

1340. Does any part of the salary of the trustee depend upon the fees, or is he paid a definite income?—He is paid a definite income, a fixed salary.

1341. And he is not personally responsible, except in case of direct defalcation; he has got the State to fall back upon?—Yes.

Mr. CHARLES HENRY MORTON, was called in; and Examined.

*Chairman.*

1342. YOU have been good enough to attend here and give evidence in pursuance of a request that some gentleman should come from the Associated Provincial Law Societies?—Yes, I am one of the secretaries of that association, and also president of the Liverpool Law Society, which is the largest of all the country law societies. The association consists of about 50 law societies, spread over the whole country, and upon this particular subject I think they are unanimous. I have had 25 years' experience as a solicitor, and I act for trustees who control I think two millions of money, exclusive of realty.

1343. They have, I presume, considered it, and passed resolutions?—The principle of the Public Trustee Bill which has been twice introduced, has been most fully considered in all its bearings.

1344. Have they passed any resolutions?—They passed a resolution on each of the occasions on which the Bill has been before the House of Lords, against the principle of a public trustee; not as an academic proposition, that a man should not have the right of appointing him if he thought fit, but because of the fear (and experience in other directions rather justified the fear) that he would in time be compulsorily allied with every trust.

*Chairman*—continued.

1345. But, in the first place, as I understand, although the societies may have academic sympathies, or at all events be free from academic aversions, they entirely object to the Bill becoming law?—Yes, they do, because they knew that no testator or settlor would appoint a public trustee without some inquiry as to his functions, duties and attendant costs; and, as soon as a testator was informed what might happen, he would not appoint him.

1346. The result is then that they object to his having the option of appointing him?—Yes.

1347. On the ground that it might lead to his being compelled to do so?—Yes.

1348. Are we to understand that this is an unqualified objection to a public trustee being appointed at all, or undertaking any functions whatever?—Yes, quite so.

1349. I only want to know whether it is a general view which is absolutely unqualified?—Yes.

1350. You do not even admit that it might be desirable that he should act as custodian of funds?—No, I think it is quite impracticable. I think if any one had had the experience which I have had with the official trustee of charities (who is a depository of funds) he would never suggest another

*Chairman*—continued.

another such, who, if he does not agree with the recommendations of the local trustee, over-rides their views. I have had experience of making the official trustee of charities the depository. My last experience is that the lay trustees declined to meet again. They say that they are useless, and that the Charity Commissioners may administer the trust in any way they like.

1351. We have had evidence before us that the official trustee of charities has been a great success, and is the depository of no less than 17,000,000*l.*?—So I believe; but, practically, he is an administrator; he cannot be a mere depository, for this reason: that when any capital is required for the purpose of the charity or trust, application has to be made to the official trustee, who naturally desires to be satisfied as to what is to be done with that money, why it is wanted; and evidence, and strong evidence, has to be furnished. So that he at once exercises a discretion and he becomes, to all intents and purposes, the sole and active trustee.

1352. But, as you have mentioned it, I should like to ask a few more questions about it; will you tell us the circumstance, and, if you do not object, the name, of the case which leads you to think that the official trustee of charities has been a failure?—I only say that he has been a failure in the cases which I have had to do with. In the cases which I have had I say that the trustees cannot get their own way; they come into conflict.

1353. In reference to what cannot they get their own way?—They cannot get the money they want. I should have, of course, to go into a long story if I went into the whole history of it.

1354. But you have told us what we have not heard before, that the official trustee of charities has been a failure, and that people will not have anything to do with him. I should like to ask your ground for saying so, because we are going to have a representative of the Charity Commissioners here, and I should like to put it to him?—I would not have him, because the trustees upon the spot know better the wants of the trust and how they can be best supplied; and it seems impossible, I do not know why, to make the Charity Commission in London exactly understand that. They have their own views; they may be perfectly right: I do not say they are not; but when they do not coincide with those of the local trustees, the official trustee naturally gets his own way, because he is the depository of the funds.

1355. Can you give me a concrete case of where the official trustee of charities has been noxious and objectionable. I do not want to trouble you with making the names public, but will you give us an indication which will enable us to follow it up with the official trustee of charities?—I could; but it is a little difficult for me to make public the private affairs of another trust.

Mr. *Warmington.*

1356. You have been in correspondence with the office?—Yes.

1357. Have you any objection to giving us

Mr. *Warmington*—continued.

that correspondence between your office and the Charity Commission, suppressing the names?——

*Chairman.*

1358. Or, if you write the name down, we would not disclose the name to anybody, because one does not want to enter upon private matters; but it is a point of great public interest, and if a charge is made, and publicly made, that the official trustee of charities proceedings are of a character that would naturally discredit an extension of the idea of a public trustee of any other kind, one ought to know it in order to be able to follow it out?—I will give this instance: The income of one of these charities is to be applied for the benefit of certain students; the local trustees thought that they ought to have a discretion to make a grant to a student spread over a term of five years. The Charity Commission say that that is too long. The local trustees in Liverpool say: "We ought to know better; we know our students; we know the curriculum, and what they have to do"; "No," says the Charity Commission, "you shall not."

Sir *George Osborne Morgan.*

1359. Could you tell us when that case occurred, so as to identify it?—It was within the last two years. I think it only fair to say that the Charity Commissioners gave way there; but it was owing to the personal influence of a well-known gentleman, a close personal friend of the Commissioners, who went privately and argued the matter with them.

*Chairman.*

1360. I understand that being a complaint against the Charity Commission; but how has the official trustee of charities anything to do with it?—If the local trustees had this fund in their own hands they would not have asked anybody; they would have applied this fund for five years.

1361. Does not that amount to this: that the local trustees of charities, and not the Charity Commissioners, in your opinion should be the persons to exercise the discretion?—Certainly. If the official trustee would be so obliging as always to do what the local trustees told him, I do not object.

1362. You are aware that the official trustee has no discretion in the business at all; he is merely the depository of the money?—Yes, but he obeys the direction of the Charity Commission.

1363. If a lawful order is made. But I was asking you whether your societies objected to a public trustee existing even as the custodian of money, and you said in answer, I think, to that, that that system existed in regard to the official trustee of charities and did not work well?—Not in my experience.

1364. Can you tell me any case in which the public trustee of charities, as being the custodian of money, has led to difficulties?—It leads to conflict.

1365. What sort of conflict?—I have just given an instance, that is one; I could give several such. Of course, if you could have an official trustee

*Chairman*—continued.

trustee, who, at the behest of the private trustee, did everything he was asked, it would work; but I cannot conceive that any official trustee who has to take the responsibility would be so obliging; it would be unreasonable to ask him. Somebody must prevail, and if he differs from the private trustee it would be he.

1366. You are rather referring, are you not, to the cases where a discretion has to be exercised by the trustee?—Yes, I am.

1367. Just for one moment put them aside, if you please, if you do not mind, and tell us is there any difficulty in cases, for example, where there is a settlement, and nothing has to be done for 20 years but pay the interest of the money to, we will say, the widow, and afterwards to distribute it equally among the children, according to the terms of a simple settlement. Where is the difficulty in there being an official trustee as custodian?—In a simple case like that, in which there is never to be a change, there would not be very much difficulty; but those cases are exceedingly rare. The only conflict I could conceive there, would be on the subject of investment, and, if it was a real estate, touching the management of the property and advances to children, powers for which are incorporated in almost every settlement.

1368. Do you think that in point of fact there are any considerable defalcations at present?—In my time, 25 years, and with the large sum that I referred to, I have known four cases.

1369. Four fraudulent trustees?—Four fraudulent trustees.

1370. You are not speaking of breaches of trust?—No; four fraudulent trustees. And in my connection with the local law society of 18 years (all such cases in the locality come before the Committee), I have known nine cases in the 18 years; the latter would be solicitors only; the other four were not all solicitors.

1371. Then I gather that you think that there is is not much defalcation, I mean by that, fraudulent misappropriation of trust funds?—I am sure there is very little really, especially when compared with the enormous sum of money held by trustees. There would always be fraud, because if it were not the trustee who was in default, the managing agent, or whatever you like to call him, would be just as likely to commit fraud as the trustee himself.

1372. Would not there be a difference between the two. In the case of the trustee he would have command of the corpus of the property, and in the case of the managing agent, he would not have the estate?—It would be minimised, certainly, to that extent.

1373. Is it not all the difference between the corpus of the property and one year's income or six months' income?—Yes, in the case of an estate consisting of shares.

1374. Because directly the income was not paid the beneficiaries would cry out?—I had rather in my mind cases of carrying on business, the executorial part of the duties of trustees, if I may call it so. It is difficult to distinguish between the two in practice.

1375. I will ask you about those cases in a moment; but I was dealing rather, for the instant, with existing property. Is it not the case that a managing agent can do very little harm,



*Chairman*—continued.

because as soon as he fails to make over a certain payment, of an annual or half-yearly character, the beneficiaries immediately complain, of course?—Yes.

1376. And then it could not occur again?—Not with that agent.

1377. But in the case of a fraudulent trustee, he could dispose of the whole property, and dissipate it, as we have known instances, without anybody detecting it?—That might be so with a sole trustee.

1378. And there would be no means of calling him to account, unless there were some ground for apprehending misconduct?—That would be so. There is no doubt that the appointment of an official trustee would make the risk of fraud less; I think it certainly would be so. But a risk would be there, and it is only a question of the capacity of somebody to circumvent the additional difficulty and to commit fraud.

1379. To the extent to which the public trustee became concerned in and had property vested in him, either alone or jointly with others, it would obliterate the chances of fraud altogether to that extent, would it not?—Except in a case of forgery, and excepting the fraud of a member of the staff.

1380. You mean forgery by whom?—A great number of frauds committed now are cases of forgery, the forgery of the signature of the honest co-trustee. All the cases I know were cases of forgery.

1381. Forgery of a name?—Yes, all those four cases were forgery of a name.

1382. Was it real property?—No, it was shares.

1383. And the name of the honest trustee was forged by the dishonest trustee?—There were some mortgages; yes, that would be so.

1384. I thought you said shares?—I think I am wrong; if I remember rightly, they were mortgages.

1385. Then did the person sign who had the legal estate in them?—The mortgage was vested, in the case I have in my mind, in two trustees; one was the forger and the other an honest man. The honest man's name was forged by the co-trustee, who presented a re-conveyance apparently duly signed by both, and received the money.

1386. What was the legal effect of that in passing the estate?—It did not pass it.

1387. Therefore the persons defrauded in that case were the persons who were induced to pay the money for property which they did not get? It so happened that the remedy was lost owing to other circumstances.

1388. But that would have been the legal situation?—Yes.

1389. So that if you had a public trustee, in the case of realty without his signature no title could be made?—No.

1390. In point of fact, I suppose, that to the extent to which property was vested in him the *cestui que* trust would be absolutely secure against defalcation, assuming that he was an honest man?—Yes, I think the risk would be certainly reduced.

1391. I thought you would say so. But you consider that there are difficulties, I gather, from the proof which you have been good enough to send to me, and the first you think is want of adaptability?—Yes, I do.

1392. Will you kindly tell us what you think

*Chairman*—continued.

of that, in your own words?—First of all, the functions of guardians are so inextricably mixed up with the functions of trustee that I do not see how they can be dissociated; and I cannot conceive that anybody would be more unsuitable to consider, say, the temperament and idiosyncrasies of infants, than a public trustee. A private trustee, who is usually a relative or close friend, is far better suited and much more likely to know the family circumstances, history, temperament, tastes, habits, and the like. Then again, there is the very frequent case of testators leaving a business behind them.

1393. Before you go to that I should like to ask you a question about the other point: do you mean that where there are such things as power to pay money for the advancement of children, and so forth, a discretion of that kind could not be easily exercised by an official trustee?—It would be very difficult, I think.

1394. Then do you think that that would be in any way affected if an official trustee were to be associated with members of the family as a joint trustee?—That position would certainly not be so difficult, provided the official trustee would undertake to give way to the views of the private trustee in every case. In that case what would be the use of him?

1395. Does infallibility belong only to private trustees?—I am speaking entirely now of discretions. I think everyone must admit that in a trust that lasts, say, 50 years there can be no mandatory direction in the original instrument which can possibly foresee and adapt itself to all the circumstances of that long period. Therefore private trustees must, and do daily, break their trust technically. They exercise discretions which they have no business to exercise very often, I admit, but they are bound to do it. Those are cases in which a public trustee would never do so.

1396. Apart from the point of what has been called here judicious breaches of trust, do you think that in carrying out a trust, in exercising discretion within the trust, the public trustee, were he to consult the family, and the family solicitor, if necessary, would not be able to exercise a reasonable discretion in a matter of that kind?—No, I do not think he would. But you come at once there on the question of cost; because to explain at a distance (because it probably will be at some distance) all the peculiarities of the family and the family property means evidence—evidence of some kind, I do not care how simple, and that all means cost.

1397. I will ask you about that matter of cost as a whole, if you please?—It is intermingled with every point almost.

1398. I will ask you upon that as a whole; but you think there would be another objection, as I understand, to the appointment of an official trustee, because he would be unwilling, as certainly he would be, to undertake what Lord Justice Lindley called judicious breaches of trusts?—Yes; and I think he must.

1399. It is rather a formidable proposition, is it not?—Yes, I admit it; I think Lord Justice Lindley's suggestion, which you read out in this room a few days ago, is quite impracticable, really, for this reason: I have taken the opportunity of sounding the minds of three district registrars, who told me they would expect strict evidence, no matter what discretion to dispense with of evidence was given them. And that is the difficulty: if the responsibility is with the public trustee or his deputy, it is unreasonable to expect him to do otherwise than act upon strict evidence.

*Chairman*—continued.

1400. But in the distribution of property by an executor, for example, whether a public executor or not, or in the management of family settlements, it is not as if the thing was wrapped up in some deep mystery. A little journey down, see the family and talk things over for an hour or two, would let a man know, would it not, all that was really required to be known about the family peculiarities?—Do you mean that you would allow the public trustee to act upon *ex parte* statements, without legal testimony and without hearing the other side?

1401. I did not mean that; but do not you think that any particular fact in connection with the family could be very easily ascertained in a short interview by a person who went really with a willing mind to find out?—Yes, certainly, apart from the question of expense and the delay.

1402. I stopped you when you came to the question of managing business. I think you said that the management of a business was another obstacle to the appointment of a public trustee; you think it would be a difficult thing for an official trustee to carry out?—I do not see how that could be done. Where I practice, as in Liverpool, every man has a business, you may say the realisation, the getting rid of that business, or carrying it on for a time, is probably the most important part of the initial stages of a trust.

1403. You mean that it is the most important part of what a man leaves?—Yes, further, everything depends upon how it is managed whether a trust is made richer or poorer in the case of a Liverpool merchant with assets all over the world. The foreign assets must be realised at once, because it very often means loss if there is any delay. I cannot conceive of a more dreadful state of things than having to refer to a public trustee as to what steps you are to take so as to secure those assets, and discharge the obligations of the business.

1404. The management of a business is usually carried on for a short time or taken over by the sons, is it not?—It is generally carried on, I should say, on an average, six months, but it often long exceeds that period.

1405. Is it usual to sell at death?—Generally, arrangements are made to sell the business to other firms. There are sometimes, of course, adult sons. If there are partners, of course, there is not much difficulty; but where there are sons who are not in partnership some arrangement is made whereby one son is made a kind of receiver. That is a common way.

1406. In those cases, whether the public trustee were appointed or not, you think it would be dangerous, at all events to begin with, for a public trustee to undertake such trusts?—Yes.

1407. You would not comtemplate that?—Certainly not.

1408. I think

*Chairman*—continued.

1408. I think the next point that you refer to in your proof is about the public trustee acting jointly with a private trustee. You think that that would be unworkable?—I think that would be unworkable, and my own opinion is that there would be nothing like a corresponding advantage, from the difficulty the position would create.

1409. Do not you think that there is one advantage from it; indeed you have told us quite fairly that there would be one advantage, and that would be the safe-guarding of the property?—I think it would make it less risky; but I think it is quite a mistake to suppose that there is any extent of fraud at all; I do not think that there is a sufficient reason, if fraud only is to be the reason, for the change, and I am sure no amount of fraud exists. I have inquired carefully among my friends, and my case is not exceptional. I have known four cases of fraudulent trustees, but I find that other large firms in Liverpool have not known so much in the same period. These cases get into the newspapers and wide publicity is given to them, and everybody jumps to the conclusion that they are of frequent occurrence.

1410. One thing I think in which most of us would agree, at least I would, is your view that a conscientious and competent private trustee is the best person to administer a trust?—That is quite my view.

1411. That is to say, of course, so long as he lives; but in the case of a long trust there are considerable changes, are there not, and the appointment of new trustees, which means expense, of course?—Yes, but not necessarily a large expense.

1412. And does it not also mean this: that gradually the property comes from the hands of those originally selected as trustees into the hands of those who are comparative strangers?—No, very rarely indeed. I am speaking now of larger estates, perhaps. In the larger estates there are always relatives and friends willing to undertake trusts if they were not so frightened of the consequences; but they are so afraid of what will happen. In the small trusts when the trustee dies the family possess themselves of the property very often, in the small class of trades people, I mean, and the better class of artisans.

1413. There is no probate or anything else?—Possibly not; and if there were I think you may take it that there would still be a good deal of breach of trust, careless and negligent breach of trust, among that class.

1414. You mean persons taking possession of, and making themselves executors *de son tort*, and other cases?—Yes, largely. You may have an executor who proves his will and immediately hands over the capital fund to the widow to do the best she can with, and she spends it on herself and family, which is probably the best destination of the money. But with regard to large estates, there is no practical difficulty in finding a man who would do it if he were not disinclined, disinclined because of the fear of the consequences; I cannot call to mind a case in which I have not been able to find a man.

1415. But he is afraid of the severity of the law?—Yes.

1416. And, I suppose, of the gratuitous labour which he would have to bestow?—Yes. You cannot expect a man to collect, for instance, the rents of houses; and yet the law requires that he shall in certain cases. He is not entitled, I believe, to instruct an agent, and pay that agent a commission at the cost of the trust estate on collecting the rents of large properties. On small properties he may. On large properties it was held that he could not.

*Chairman*—continued.

1417. Could not employ an agent?—Could not employ an agent at the cost of the trust estate. The trustee employed an agent in the case that I refer to, and paid him a commission of 5 per cent., and he was surcharged with that 5 per cent.

1418. It would depend upon the circumstances of the particular case, would it not?—They were large villa residences in that case.

1419. They were not supposed to be such as to involve the employment of an agent?—But why not, when, if the property had been the man's own, he would have done so?

1420. I was not involved in the decision?—But if the property had been the man's own he certainly would have employed an agent.

1421. No doubt it may have been hard in that particular case; but your view, I gather, is that the private trustee should be encouraged?—Yes, I think the private trustee should be encouraged by being allowed to delegate ministerial work.

1422. And to charge the trust with the money?—Yes, and to charge the trust with the cost, in every case where it is a man's ordinary practice to do so, with his own affairs.

Sir *George Osborne Morgan.*

1423. Just as in the collection of cottage rents?—It has never been held that he may not in the collection of cottage rents; but why should he collect the rent, say, of a farm personally?

*Chairman.*

1424. It practically comes to this: that he is to be allowed, more freely than he at present is allowed, to employ accountants or solicitors to conduct the affairs of the trust?—Yes, there is a clause in every well-drawn will, Mr. Wolstenholme's clause as we know it, which is incorporated in all well-drawn settlements and wills, and that gives him the necessary power, and I would make that clause statutory.

1425. But to that extent it would be an increase in the expense of administering trusts, of course?—It would; but of course the public trustee, I take it, would have a corresponding charge.

1426. The public trustee, I am afraid, must run upon his own legs; but that would increase the expense, while it would not add to the security, would it?—In practice it would never increase the expense, because a man always does it and takes the chance.

1427. You would make it lawful, at all events?—Yes.

1428. And I think you would also recommend that where damages are claimed for a breach of trust, the trustee should be entitled to claim a special jury, and that the law should be so changed that the point put should be whether he had exercised reasonable and proper care, and, if so, that he should have a verdict?—Yes,

*Chairman*—continued.

Yes, I personally have a strong opinion that should be so. The law now is, I take it, that the trustee is not responsible, provided that he has exercised reasonable and proper care such as he would in the management of his own affairs; but a discretion must lie with some one to say whether he has or has not done so; and the difficulty is that, whilst one judge, Lord Justice Lindley, for example, would probably say that he had, another judge might be of opinion that he had not. One must remember that judges grow old, and they are a class apart from the every-day life of commerce, and they forget, or do not know really, what is going on; changes now-a-days are rapid and great. A jury will always know what is customary and practical, and they are a far better tribunal to say whether the trustee has or has not done what he ought to have done. Take the Bradford case of Speight *v.* Grant, where the unfortunate trustee was made responsible because he paid the stockbroker the cash with which to take up the funds the latter had bought. Trustees had to thank God that there was a Court of Appeal. The Court of Appeal overruled that decision, and the House of Lords confirmed the Court of Appeal; but even the House of Lords said (the bonds purchased were corporation bonds) if the trustee had happened to know that he could have gone to the corporation and paid the money over the counter, he would have been liable. Now surely if he had subscribed for bonds on his own account, he would have instructed an agent or broker to complete the transaction.

1429. We have had that case mentioned before. Is there any other suggestion that you would like to make?—I think I have already suggested that trustees should be entitled to employ and pay persons, and I think it would be a good thing (though this I may say is entirely my own view, and has not received the *imprimatur* of the association) that there should be discretionary power given to trustees to select the time to realise investments. The common form of will used to be to devise to trustees upon trust for sale. I take it that his duty then is to sell within 12 months of the death of the testator; but you very often have shares at a heavy discount; take shipping shares, which at the moment are, in many cases, worth about as many shillings as they nominally are worth pounds. A trustee acting strictly must sell at a serious loss to the trust estate. On the other hand, if he says, "I will chance it, and wait three years," and they go lower, he is made responsible.

Sir *George Osborne Morgan.*

1430. Every well-drawn will contains a discretionary power, though, as to that?—Yes; but I would make that discretion statutory. The trustee acts for the best. I would also venture to suggest that it would be very desirable to allow trustees to apply to the chief clerk or to a judge in chambers, or the district registrar, or even the county court judge on an *ex parte* statement, not necessarily a sworn statement, for direction on many points. I can quite conceive of cases (not a question of construction) where it is not necessary to have an argument; and I see no reason why the trustee should not, as is done on the common law side, take out a summons, and go to the judge. The advocate makes his statement, and the judge says, "Take an order," and he writes it on the back, and that is all that happens. It would be simple and inexpensive, and constantly taken advantage of. At present you have to begin an administration action or issue on an originating summons, and go through a long and tedious number of inquiries before you get to that point; I would dispense with the writ and originating summons.

Sir *George Osborne Morgan*—continued.

*Chairman.*

1431. Most of what you have been saying applies to the larger classes of estates, I think?—Yes, but not my recommendations.

1432. I should like to ask you now about the smaller estates. We have heard in evidence that there is a Public Trust Office in New Zealand, which in the case of small estates is highly valued. Do you think that nothing can be done for the purpose of safe-guarding and inexpensively distributing small estates in this country?—Do you mean done against the will of the party.

1433. No, voluntarily; that in case people chose to apply for it, there should be some official who should be able to distribute small estates, instead of making it compulsory upon these people, with their little sums of money, to go and employ trustees, who, being small people, are more likely to rob them?—That does happen, I fear. There is always the county court to resort to, but they will not go to it. You have the machinery already on the equity side of the county court up to 500*l.*, but they will not avail themselves of it. But there it is, and no Public Trustee Department could be better.

1434. Is not the county court far from being a cheap proceeding in the matter of administration?—I would rather have that, I should say, than the public trustee. I do not know what the cost of a public trustee would be, but I do not think it likely to be cheaper than the county court.

1435. Could you give us an indication of what you think the administration of an estate of 500*l.* in the county court would cost; it might well cost a couple of hundreds, might it not?—No, certainly not; 50*l.*, more likely.

1436. You mean administration in the ordinary case of a small estate?—Yes; I do not think it would cost more than 50*l.*; but I am speaking of a simple will, say to the widow for life, and then to the children at the age of 21.

1437. Yes, but that is a simple proceeding. If there is any difficulty at all, you would have to employ a solicitor. I do not know that a lay person would know how to approach the county court; I should not myself?—Yes, they would have to employ a solicitor, but solicitors' fees in the county court are so small that I do not think they are a material item. The principal cost would be the court fees and other disbursements.

1438. At all events, you think that neither for small nor large estates it is desirable to have any public trustee at all?—I am quite sure that in small estates, where there is the most need, as I admit at once, the cost would be prohibitive. It depends

*Chairman*—continued.

depends upon what that cost is; but I am assuming that the department must be self-supporting.

1439. But that, of course, is a matter which I suppose we can best hear from some financial department who would probably have thought it out?—Yes; it is difficult to estimate, because it depends upon the amount of business that flows in. The fixed charges would be spread over large districts and small ones. I am quite sure it would be very little availed of unless you apply compulsion.

1440. You began by saying that you thought this Bill, if once passed, would from being optional, tend to become compulsory?—Yes, I fear so; I think it is inevitable.

1441. Why?—I will take the case, if I may put it colloquially, of a man coming to me, who asks me: "What about the public trustee?" I immediately tell him the danger, the cost, and possible delay that would be involved, and then he would say: "I will not have anything to do with him." You would not get the public trustee appointed, I am afraid, except by a very strong willed man. You spread over the whole country (for this is a populous country, it is not like New Zealand), an office with deputies, and a skilled staff, because no ordinary staff would be competent, and you would have a very heavy cost at once, in office expenses and salaries. Those offices would be very rarely used. What is going to happen? Are you going to disestablish it? Would the Treasury face the compensation in pensions of that numerous staff? What must happen? The only thing that can happen is, that you must compel business to go into the Department. The Treasury, as the guardian of the public purse, would scarcely acquiesce in a deficit year after year. Take the Land Registry as an instance, it is proposed to make that compulsory, and it is quite reasonable from the point of view of that department. Or take the bankruptcy side of the Board of Trade.

1442. In the case of the Land Registry, if any proposal exists to make it compulsory it is not based upon the necessity of providing someone with some work to do, but rather upon the principle of simplifying the transfer of land; I do not say whether it is a right policy or not?—My own opinion is that it is based upon the necessity for giving it something to do.

1443. However, it is your view that there would be great initial expenditure, which would involve a large number of salaries and a net work of organisation, and that then, in order to prevent the whole being wasted, Parliament would be asked to make the system compulsory?—I fear so.

1444. Is there anything further you would wish to say?—There is only one suggestion, if I might be allowed to make it, and that is, that the Legislature might empower the court to relieve trustees. At present a judge very reluctantly makes the trustee liable, because he cannot help himself, and that seems to be a very serious blot upon our administration. A judge would often give an honest trustee relief who has simply made a mistake. It is easy to look back and see how one has made a mistake; but it is difficult to look forward.

*Chairman*—continued.

1445. And you would give the Court a discretionary power to relieve trustees who have only done their best?—Yes. And in addition to enlarging their own discretion, I would give the Court power to go even further than the trustee could.

Sir *Charles Pearson.*

1446. Have you found in practice that the difficulty in getting either original trustees to act, or assumed trustees to act, is a serious one?—A testator in his life time finds great disinclination on the part of friends, but his personal influence invariably overbears the refusal. It is when the testator's influence is gone (after his death) that the difficulty arises; there is a practical difficulty in finding new trustees for old wills and old settlements.

1447. You have stated to us one or two considerations which deter people from accepting such a position; do you add to those any proposal for a relaxation of the law of trusts otherwise?—In the way I have already suggested, that they should be empowered to employ and pay persons to act for them.

1448. Only those which you have mentioned; not the relaxation of the penalties upon errors of judgment and excess of power, apart altogether from fraud?—I think a trustee ought not to be made responsible for errors of judgment where, as I say, a jury or a judge have said that he did it with the best intention, and having regard to the light of that day.

1449. However, you have summed up to us in your evidence the considerations that bear upon that part of the question?—Yes.

1450. What is the alternative when you cannot get anyone willing to be assumed as a trustee in an old trust; does the Court appoint a receiver?—The Court has inherent power to appoint a paid trustee; but I believe (Mr. Warmington will correct me there) it never does; the Vice-Chancellor of the Duchy of Lancaster, however, has done it in my own experience twice.

1451. What is the difference between a paid trustee and a receiver; is there any difference as to liability?—A receiver is responsible for funds coming to his hands just the same as a private trustee would be; but take the case of an old settlement which is really managed by an accountant and solicitor. In a case that I know the Court said: "Whoever is appointed will be a mere lay figure; let the accountant and the solicitor take the responsibility, without forfeiting the remuneration they are now receiving."

1452. What is the officer that the Court here in England appoints when there is no new trustee to be appointed?—Very often a receiver and manager, if a trustee cannot be found.

1453. I want to know whether the discretionary powers vested in trustees are regarded as vested in a receiver?—That would be according to the Order of the Court, but not otherwise.

1454. But I assume that the instrument creating the trust confers certain powers upon the trustees, and I want to know whether such powers would be vested in a receiver?—No.

1455. He would have to apply to the Court on the occasion of each exercise of discretion?—Certainly.

Mr. *Arthur O'Connor.*

1456. I suppose that a trustee, by the very nature of his appointment, is a person in whom the creator of a trust has some special confidence, and whose judgment he desires to have exercised for the benefit of the beneficiaries?—Yes, that is the theory.

1457. Something more than a mere depository of funds?—Yes.

1458. Then with regard to the willing mind of an official, I suppose that however willing a mind an official might have to assist towards the beneficial administration of a trust fund or property, he would always have to be bound necessarily by statutory provisions, and by the regulations laid down under them?—It seems to me so.

1459. And he would not be able to depart from the lines so laid down?—I am quite sure he would not.

1460. Even to exercise his discretion within those lines he would require to be moved, and to be convinced by evidence?—Quite so.

1461. All of which would mean expenditure?—Certainly.

1462. I suppose you are not unwilling to consider the advisability or necessity of appointing some public officer in case it should be proved to be necessary; your mind is open with regard to that?—If there were no other alternative, certainly.

1463. Let me instance this case to you: A man who had made a great deal of money suddenly in New Zealand comes over to this country with his family and dies, having no one of education to whom he can turn to appoint as trustee, what would you have him do? Would it not be a great advantage and satisfaction to such a man to be able to place his money in safe hands, even though he did not know the person?—You are assuming that he did not know any one in England fit to be a trustee.

1464. Yes, or, for the matter of that, in Australia?—On that assumption I should say, yes; but it is an assumption that I should think one would never find an illustration of.

1465. Do you not think that there may be a good many cases in which people who have made money would rather not trust some of their immediate relatives with the custody of it for their wives and children?—I cannot conceive of a man of that kind who has not some business agents in this country whom he would nominate as his trustee at a remuneration.

1466. You mean that the proportion of such cases would be so small that they ought not to be provided for?—Very small; I have never known such a case, and I have known many such people.

1467. I suppose that the rules which would regulate the action of a public trustee not be the same as those which would regulate the action of a private trustee, even where the public trustee was associated with a private trustee?—No, I take it that the public trustee would get his authority from the Statute, whereas a private trustee would be guided by Equity Law, and you would probably have a conflict at once as to what one might do, and the other might not.

1468. Then again, with regard to paid agents, I suppose the public trustee would require to have paid agents if he did anything in the way of administration?—Certainly, with the risk of fraud, of course.

Mr. *Arthur O'Connor*—continued.

1469. And you would suggest that trustees should be allowed the ordinary business expenses for conducting the management of a trust estate?—If you mean trustees at large, I think it would be a very dangerous innovation (this is my own opinion) to let every trustee be paid.

1470. No, I mean the out-of-pocket expenses?—Certainly.

1471. Such as collecting rents?—Certainly.

1472. And the professional charges of the solicitor?—Certainly; or of an accountant, where, under ordinary circumstances, he would have employed a solicitor or accountant.

Sir *George Osborne Morgan.*

1473. He would be allowed that now, would he not?—I think he would be allowed solicitor's charges; but I would also suggest that he might be allowed to appoint a solicitor to do administrative acts, such as dividing an estate; he must do it himself now.

Mr. *Arthur O'Connor.*

1474. Then, as I understand it, you think that if some of the rules, which as at present stringently administered, make the position of a trustee so difficult and risky, were relaxed, there would not be the same difficulty as there now is in obtaining trustees?—No, I think it would practically disappear.

1475. And I understand one of your proposals to be that the question of breach or no breach of trust should be a question for a jury?—Certainly.

1476. As a question of negligence or no negligence now is?—Yes; within the law laid down. Of course the judge would lay down what the law was; the abstract principle. I would not let a jury dictate the law; but I would let the jury find the fact whether this trustee had or had not, committed a breach of trust.

1477. Breach or no breach would be a question for the jury?—Yes.

1478. Just as libel or no libel is?—Yes.

1479. And negligence or no negligence?—Yes.

Mr. *Warmington.*

1480. Any relaxation, I suppose, that you would recommend, would not go so far as to depart from the letter of the trust?—I gave an instance just now that I would let trustees exercise a discretion.

1481. Supposing a will or a trust in which the testator or settlor said: My trustees shall act in such a way, and not have discretion?—Then I would give the Court power, but I would not give the trustee power.

1482. You would give the Court power to override the express direction of a trustee or settler?—Yes, I would; because it might be 50 years after the trust was created. The Court would not be likely to over-ride the testator's express wish immediately after his death; in the course of years, an entirely different and unforeseen set of circumstances may arise.

1483. Do you not think that would bring in a great deal of uncertainty?—Truly; it must necessarily.

1484. And

Mr. *Warmington*—continued.

1484. And your experience as a lawyer probably is that uncertainty is almost as dangerous as illegality?—Not on matters of discretion. But you cannot compare these administrations of trusts with actions upon a contract, for instance, where uncertainty would be fatal, because they are all matters of discretion, of every day use.

1485. Would you allow the Court, for instance, to interfere after the event, or only before the event; for instance, with regard to an investment which was outside the ambit of the trust, and a trustee took upon himself to make an investment of trust funds which was improper, would you allow the Court to say, "You did it honestly"?—Certainly not, if it was done with malice aforethought; but if it was a mistake I would. Take a common case, in which bonds are exchanged. I had a case myself in which some Egyptian bonds were exchanged for a new issue. The trustee did it without consulting the solicitor, and he was made responsible, because the new issue did not exactly come within the terms of the investment clause. I would relieve that trustee.

1486. You would also relax, I suppose, in this direction: that you would allow him to delegate some of the routine work to agents, who should be remunerated?—Yes.

1487. I do not quite like to enter upon it, but you are old enough (if you will allow me to put it in that way) to recollect the litigation with regard to charity funds before the appointment of the Official Trustee of Charities?—No, I am not.

1488. Have you not heard of the immense sums of money which were lost to charities?—The cases are not parallel. I have no doubt that was so. I do not know it of my own knowledge.

1489. There was scarcely a village, certainly not a town, in which immense sums had not been lost?—No doubt.

1490. And have not those losses been almost put an end to by the appointment of the official trustee?—Where they have gone in the hands of the trustee.

1491. And that power is so constantly used that now we do not hear of a breach of trust of charity funds, do we?—I could give you a good many myself, numbers of them. It would prevent that. But they are so very different from private estates that they are hardly parallel cases.

1492. I will not pursue that subject any further. I want simply to correct your evidence with regard to a receiver. A receiver is in no sense a trustee, is he?—No.

1493. He takes his power from the Order appointing him?—Yes.

1494. He is no administrator?—No.

1495. He is simply an officer of the Court?—Yes.

Sir *George Osborne Morgan.*

1496. Do you think that the difficulty of finding trustees would be lessened if trustees in this country were, as is the case, I believe, in nearly all continental countries, allowed a small remuneration for their trouble; a percentage say?—It would be removed entirely; but I should be sorry to see it. I think it would create a class of professional trustees.

1497. You said, which no doubt is the case, that you have had little experience of any fraudulent defalcations on the part of trustees?—Very little.

1498. But I suppose there are a great many cases where, through carelessness or easy-goingness (if there is such a word) on the part of trustees, the trust funds are lost?—Trust funds are principally lost from negligence.

1499. I understood you to say that the joining together of a private trustee and a public trustee would lead to almost intolerable friction, unless the public trustee practically effaced himself?—I hope I did not say it quite so strongly as that; but it would be sure to lead to some friction, and lead certainly to great expense.

1500. Unless, as I say, the public trustee practically handed over the trust to the private trustee?—Certainly.

1501. I suppose you would agree with Lord Justice Lindley that sometimes it is almost the duty of the trustee to be guilty of what he called a judicious breach of trust?—One does it every week with one's eyes open. You cannot help yourself.

1502. Of course, a public trustee could not do that; he could not lend himself to that, unless he obtained the sanction of the Court?—No.

1503. You suggested that it would be desirable that a trustee should have the power at any time to go before a judge in chambers, or chief clerk in chambers, for directions; but he has that power already under Lord St. Leonard's Act, has he not?—Yes, he has; but the process is a little too expensive. The judge invariably asks, "Is every one represented here? And Mr. A. jumps up, and Mr. B. jumps up, it is a most ridiculous waste of money. I would supplement the present power by letting the trustee apply on *ex parte* statements, and without evidence, to put the simple point, for instance: "I want to invest in deferred ordinary stock"; he would put this into writing and add: "Is it within the investment clause"? Why should not the judge say, "Yes," and write his opinion then and there on the back of the statement?

1504. I fancy a good deal of that goes on now, does it not?—No, he has to take out a summons, file an affidavit, and verify the will. There is much unnecessary expense.

1505. You wish that that process should be simplified?—Yes.

1506. And you would give that power to the county court?—Yes.

1507. I believe they have it already up to 500*l.*?—Yes, they have similar jurisdiction up to 500*l.*

1508. Would you extend that jurisdiction of the county court in cases beyond 500*l.*?—Yes, I would, personally.

1509. Indefinitely?—I would to 1,000*l.*, at any rate.

*Chairman.*

1510. You know that the sheriffs in Scotland have indefinite jurisdiction in personal property, and up to 1,000*l.* in real property?—Yes.

Sir *George Osborne Morgan.*

1511. Would you go so far as to say that if this right to make use of a public trustee was made optional the result would be very much the same as in the case of the Law Transfer Office, viz.: that very few people would make use of it?—I am quite sure, practically, that he would not be used at all.

Colonel *Howard Vincent.*

1512. You have been delegated by the council of 50 law associations to come here?—Yes.

1513. Do you base your objection to the appointment of a public trustee upon public grounds or upon professional grounds?—You mean to say from the pocket point of view?

1514. From the interest of the solicitors?—In the pecuniary interest of solicitors it would be an enormous advantage; I am quite sure that their costs would be doubled. It would serve this generation's purpose; but in the long run it would probably annihilate a great deal of the business of country solicitors. But it would take a long time to do that.

1515. However, you do not think that the question of professional interest of sufficient importance to dwell upon it?—On the contrary, I am quite sure it would add largely to the profits of solicitors now practising.

1516. And you agree, in that respect, with the evidence given by the President and ex-President of the Incorporated Law Society and Lord Justice Lindley?—Yes.

*Chairman.*

1517. Is there anything else that you wish to say?—If I might make one suggestion of my own before I leave, it is that, with the view of further minimising the difficulty of finding trustees of old wills and old settlements, I think it might be desirable to give the appointor, who is generally the last surviving trustee, or possibly the tenant for life, the power to let the new trustee charge for his services. Of course, the power would have to be safeguarded, and I think it should not be given to anybody who is not an accountant or a solicitor, because they are trained trustees; if anybody can undertake a trust it is those two classes of men. I would give a new trustee of these old wills and old settlements power to charge, but safeguarding it by letting any beneficiary or other trustee take the bill of costs to any taxing master, to any district registrar, or any county court registrar, to tax those costs, without order and without process.

1518. If I may ask a question upon that, I suppose you have known, as I think some of us have known, cases in which unscrupulous persons, being trustees, have affected to make charges of a most extortionate and exorbitant and scandalous character?—Yes.

1519. There is no remedy against that now, unless the trustee happens to be a solicitor, except administration in Chancery, is there?—No, there is no remedy, and there ought to be one.

1520. Is not that a ruinous remedy?—Yes, it is very undesirable; but it would be very easy to give a remedy.

1521. Would you amend the administration in Chancery?—No, I should do without it. I should do as I suggested, let every trustee's bill of costs be treated like solicitors' bills of costs are treated, and be subject to taxation without process.

*Chairman*—continued.

1522. That would enable you to get some trustees if you allowed them to be paid, perhaps, but it would do nothing towards preventing defalcations, would it?—No; but I do not believe in them.

1523. You think nothing can be done as to them?—No, I think, too, the frauds are few. I would sum up my evidence in this way: that for the very rare and isolated cases of defalcation the sum saved, gained by reducing the risk of fraud which a public trustee might effect, would be very far outborne by the enormous aggregate of increased cost, delay, and friction which I believe would be thrown on every estate. The remedy would be worse than the evil. I think the present system ought to be amended first, as an experiment If, in the long run, the suggested amendments do not remove the evil, then try the public trustee, if you will.

1524. You see we have to consider the whole subject, and you must surely agree, and I am sure you would heartily agree that it is a great scandal that there should be these defalcations of trustees; and supposing we came to the conclusion, on the evidence, that there was a great deal of it, have you no remedy to suggest?—I would much rather have the defalcations than a public trustee. If my managing clerk commits a fraud I do not ask the Government to undertake all my other clerks' work. Every fiduciary relationship brings its crop, I am sorry to say, of frauds.

Dr. *Farquharson.*

1525. I think you expressed the opinion that if the office of public trustee was not a compulsory one very few people would apply for it?—I did.

1526. And that would minimise the probable cost which you have supposed; in other words, it would only be necessary to begin on a very small scale?—Yes, that would be so.

1527. It would be an experiment begun on a comparatively cheap scale which would not perhaps involve a very heavy expenditure at present?—It would require the appointment of a deputy in every district. No man living in Lancashire would appoint the public trustee if the public trustee were living in London. You must have one in every populous town in Lancashire, and others in Yorkshire, and so on, or they would never dream of it.

1528. But your great objection is the probability, as you think, of a demand being made to render it compulsory?—I think it would be so.

1529. But that could only be done with the consent of Parliament?—Certainly.

1530. Then the matter could be brought up here and re-argued?—Yes.

1531. That is a danger that would only come into play when the time came, and Parliament gave its consent?—The cost is there, and the deficit would have to be met, and Parliament has to provide for that; it is *ex post facto* to a great extent then.

*Thursday, 21st March* 1895.

MEMBERS PRESENT:

Mr. Attorney General.
Dr. Farquharson.
Mr. H. D. Greene.
Sir George Osborne Morgan.
Mr. Arthur O'Connor.
Sir Charles Pearson.
Sir Henry Roscoe.
Colonel Howard Vincent.
Mr. Warmington.

MR. ATTORNEY GENERAL, IN THE CHAIR.

Mr. HERBERT HARDY COZENS-HARDY (a Member of the House), Examined.

*Chairman.*

1532. You, I need hardly say, have had very great and long experience at the Bar?—Yes.

1533. And considerable experience, I believe, in the administration of trusts, and in the law relating to them?—Yes.

1534. Those matters mainly come, as we know, before the Chancery Division of the High Court of Justice?—Yes, that is so.

1535. I believe, in the House of Commons also, you took charge of the Trustee Act, 1888, and the Trustee Investment Act, 1888?—Yes, I was fortunate enough to succeed in passing them.

1536. And you have given a good deal of attention to the general subject of administration of trusts?—Yes, I think I may say that I have.

1537. What do you think about the extent to which defalcations occur by trustees?—I think the amount is very serious; but, at the same time, I think there is a good deal of exaggeration in the public mind as to the amount. Just as when there may happen to be, say a stockbroker on the Stock Exchange who is fraudulent with his customers' securities, people are sometimes apt to think that the whole of the Stock Exchange is guilty of the same sort of practice; so in any case where a trustee, or a solicitor-trustee in particular, happens to have been guilty of certain misappropriations, those transactions make a large figure in the Courts of Law, and a far larger figure in the Courts of Law than they bear in relation to the aggregate amount of trust transactions.

Sir *George Osborne Morgan.*

1538. You are speaking now of fraudulent defalcations?—Yes.

*Chairman.*

1539. We are not speaking, of course, of breach of trust, some of which, from judicial observations, we may assume to be almost meritorious; but I am speaking of the fraudulent misappropriation of trust funds?—I understood your question so.

1540. You think that the amount is exaggerated in the public mind; but, still, I think your phrase was that it was "very serious"?—Yes, very serious.

1541. Do you think that the amount is such as to justify a public desire to find some means, if it can be found, for the purpose of preventing it?—Yes; and perhaps I may just add this: that the instances of fraudulent breaches of trust or misappropriation are, I think, to a very large extent, of two kinds—first, where there is a sole trustee, whether by survivorship or originally; and, secondly, where, by the special instrument creating the trust, bearer securities are authorised. Bearer securities do give an enormous opportunity for fraud, even in the case where there is originally more than one trustee, because a bearer security must always, in the nature of things, come into the physical custody or power of one of the whole body.

1542. In the case of sole trustees, persons become sole trustees, I suppose, mainly by reason of the other trustees either refusing to act or dying?—Yes.

1543. And they are left alone and exposed to great temptations?—Yes.

1544. Do you think that the cases where there are sole trustees constitute a large proportion of these defalcations, and also that temptation arises from the sole possession of bearer securities, which may be alienated, as we know, without the concurrence of other trustees?—Yes.

Sir *George Osborne Morgan.*

1545. Which are, in fact, like bank notes?—Yes, almost. Of course, the general law has hitherto (and, if I may venture to express an opinion, most wisely) refused to sanction bearer securities for trustees; but it is an exceedingly common thing for the creators of trusts, under wills or deeds now, expressly to authorise them.

1546. By a good many trusts the trustee, I suppose, would be authorised to invest in Colonial Government Securities payable to bearer, of which I know there are a very large number?—That would, of course, rather depend upon the

Sir *George Osborne Morgan*—continued.

precise terms. The better form is to invest, in the name of trustees, in Colonial Securities, and then that would only authorise Inscribed Stock.

1547. If that were not so, of course a trustee could not invest in securities payable to bearer?—No.

*Chairman.*

1548. I believe that changes have been effected in the position of the liability of trustees by the new practice under the rules of 1883?—Yes; and with the permission of the Committee I wish to explain the extent to which, in my opinion, those changes have been effected. Most of them, I think, are extremely beneficial. Under the old law trustees were liable at any moment, at the instance of any one of their beneficiaries, to have a decree made for the taking of all their accounts; and unless they were prepared to vouch all their payments and receipts during the whole course of the administration of the trust they might find themselves landed in a very heavy liability. That was a burden almost beyond endurance. That is now put an end to. But, on the other hand, the trustees under the old system had the right to relieve themselves of responsibility by devolving the administration of the trust upon the Court of Chancery, and that without reference to any questions of difficulty of construction; but they could in that manner relieve themselves from all responsibility. Now, under the new system the judge is not bound to make an administration decree; and the judges have themselves laid down a rule for their own guidance, which some people venture to think has worked hardly on trustees. If a trustee now applied by an originating summons, as we now call it, for liberty to pay a trust fund into Court to a separate account, the judges would (not that they are bound to do it, but as a matter of practice they would) decline to make any order, and they would probably order the trustees to pay the cost of the summons. That, I venture to think, is a hardship, and almost a wrong to trustees. Under the old system the Accountant General, now the Paymaster General, was very much in the position of a public trustee for certain purposes. Trustees who wished to make the capital secure, or beneficiaries who were not quite satisfied with the trustees, could in either case get the capital of the trust estate transferred to the Paymaster General, and the Paymaster General then would pay the dividends to the tenant for life instead of the dividends being received by the trustees and going through the account in that way. And the amount of business of that kind which was done in the old Court of Chancery, and in the Chancery Division, prior to 1883, was very large. In my own experience I well remember a series of cases connected with a particular family, in which it was the common form to assert in the will, and in the deeds of settlement, an express provision that a suit should be instituted to administer the trusts of the will or of the settlement. The effect of that was, there being no question of construction or no question of a litigious nature, that the funds were transferred into Court to the credit of separate accounts; no penny of capital has ever been lost, I need

*Chairman*—continued.

not say; the dividends have been received by the tenants for life, and the expense has been extremely trivial compared with the amount of the funds in question. And I would suggest to the Committee whether, with some slight amendment in the law, advantage might not be taken of the Paymaster General to an extent which is not now available. It seems to me that there are many advantages in such a scheme. The first and great object is to keep the capital intact—to keep the capital safe; that is the great danger; it is not the income. If you are to have a public trustee of any kind, I must say that I have the strongest possible feeling that he must not be an official of, or in any way responsible to, the Treasury, or under a Public Department; but that he must be an officer of, or responsible to, a Court; and, having regard to the fact that the Chancery Division is the Division to which by law is assigned the administration of trusts, it seems inevitable that the official should be an officer of, or responsible to, the Chancery Division. Well, you have such an official in the Paymaster General. In the next place, it may be that the Committee are not quite aware of the extent to which the Paymaster General now has under his control not merely Consols, but any kind of Stocks, funds, or securities not involving any liability; and this, of course, is all that in any point of view any new trustee that might be constituted could be expected to assume. I have before me the accounts of the Supreme Court of Judicature for 1892 and 1893. The accounts for 1894 are apparently not out; at all events, I have not been able to lay my hands upon them; and I find that the Paymaster General has to the credit of the Chancery Division upwards of sixty-two millions of money now, in every variety of security—British Government, Indian Government, Bank Stock, Metropolitan Stocks, Indian Railway Securities, Colonial Government Securities, Foreign Government Securities, Railways of the United Kingdom, Foreign and Colonial Railways, Corporations and Local Authorities, Gas Companies—I will not go through them all, but every conceivable kind of security, British and foreign, with this sole limitation: that it does not involve any liability. And one more remark. I find by the Report of the Auditor General that the number of suitors' accounts upon the books at the close of the year was 41,409—that is, accounts of the nature I am indicating; that is to say, accounts in which the capital is absolutely safe, in which the income is paid from the Paymaster General, and paid under the new practice by cheques sent by post, not involving, I mean, personal attendance, as used to be the case in the old days, but sent by the Paymaster General in a manner which is in accordance with the ordinary arrangements of private life and private convenience. So that I would suggest that there is an existing machinery really available for working the main point, namely, the absolute security of the trust fund. And I do not imagine that it would require much, if any, addition either to the staff, of the Paymaster General's office or to the staff of the Chancery Chambers. Of course, one cannot avoid facing this difficulty: that every kind of suggestion

*Chairman*—continued.

suggestion for a public trustee must involve some increase of expense; inasmuch as no public trustee, whether it be the Chancery Division or another public trustee, can act without evidence, in the same way that private trustees will do who know the state of the family and the needs of the family, without requiring strict evidence. But I desire to point out to the Committee that probably under the existing law, certainly with some slight modifications, this expense might be reduced to a minimum. Under the Judicature Act of 1894, the Act of last Session, Section 3, a special power was given to the Rule Committee, of which I have the honour to be a Member, to make Rules providing that in dealing with funds in Court less than strict evidence should be required to prove the fact. I think I am right in saying that that power has not yet been acted upon; I do not think the Rule Committee have yet framed any rule upon that; but proceeding upon those lines I cannot help thinking that in an ordinary test, which after all is what I apprehend this Committee is thinking of, not any trust involving difficulties of construction, but in an ordinary trust where you have a tenant for life, and then on the death of the tenant for life the fund has to be divided amongst children or other relations, there would be a means of obtaining fromthe chief clerk in Chambers, or if necessary from a judge, an Order, which could be made in nine cases out of ten under the powers whish I suggest, without the expense of strict evidence. It may be said, of course, would not this involve a block in the Chancety Chambers? I do not think it would. The chief clerks have had a vast deal of their detail work removed from the Chambers by reason of there being now scarcely any applications for administration decrees gone into; and I do not think that it would therefore involve any serious augmentation of the staff, if indeed any augmentation of the staff at all; and it would involve absolute security to the capital, and would not involve the creation of any new department. I may suggest an analogy, which is perhaps not altogether without importance, that is, the analogy of the official trustee in charitable funds. He was appointed under the Act of 1855, and by Sections 47 to 53 his duties are stated and defined. He is simply a custodian of capital; he now holds upwards of 13,000,000*l.* of consols, besides other securities; he does not interfere with the administration of the trust; he is bound to pay the income to the trustees of a charity, and they have the application of the income without any interference by him. The result of that of course is that there has been no loss of capital; the administration of the trust is left in the hands of local persons, and persons conversant with the charity; and the capital is intact.

1549. I will ask you a few questions upon your very suggestive observations in order to enable us to follow them more in detail. As I understand, you are decidedly of opinion that whatever public trustee should be appointed, or whatever public administration of trusts should be undertaken, ought to be under the judiciary, and not under a department of the State?—Yes, I feel that very strongly.

*Chairman*—continued.

1550. Do you consider that there would be facilities for an officer of the Court (the chief clerk it might be) having ready access to the judge?—Yes.

1551. And administering the estate under his immediate supervision?—Certainly.

1552. It would, of course, give enormous confidence to anybody to know that it was to be done under the direction of one of Her Majesty's judges?—Yes.

1553. Do you think that on the other side there is any likelihood that the expense which has hitherto bulked very largely in regard to administration suits would be excessive under such a system?—I do not. What I suggest is not an administration suit in the old sense of the word at all. What I would suggest would be something of this kind: that any trustee or trustees having capital monies in their hands should be at liberty by what we now call an originating summons, which is an exceedingly simple and cheap matter, to obtain an order for the transfer of that fund to the Paymaster General to a particular account, that is a matter of detail; with an order for the payment of the dividends either to the trustees themselves or to the tenant for life, as the case may be. Then on the death of the tenant for life one or two things at least may happen. In many cases there is no question of construction; there is no real doubt as to who the persons are. In such a case, assuming that the Rule Committee saw their way to act under the powers given by the section of the last statute, an order would be made, which would indemnify the Paymaster General, and everybody, without strict proofs of the marriages and the births of the members of the family. Another case is this: There may be very serious difficulties; someone or more of the beneficiaries may have gone abroad and disappeared in the colonies. I am sure that we shall all recognise, those of us who have had experience, that that is a much more common state of things than one would perhaps imagine. In a case of that kind the chief clerk would at once go to the judge and say, "What is to be done here; must I advertise this, or what evidence shall we require as to whether a person is or is not alive or had or had not attained 21?" The third case would be this: There may be some question of construction as to class of persons entitled. There, again, nothing could be more easy or simple than to go to the judge and get the matter decided, of course, on argument if and when it is needed. I cannot help thinking that the cost of that would be very trifling, and infinitely less than the cost which would be incurred by the creation of a new Government department.

1554. Would you think that only cases of simple classes of trust should be treated in that way. You gave an illustration of a tenant for life, and then the division of the remainder to other persons after the death of the tenant for life; that is, a simple kind of trust. Would you confine the utilization of the Chancery Division to those classes, or would you allow them to take any trust that the judge thought fit to take, or that the head of the department, whosoever he might be, thought fit to take, subject to the directions of the judge?—There is scarcely any

*Chairman*—continued.

any case in which either in form or substance there is not a tenant for life of the trust estates. You may have technically, no doubt, a person absolutely entitled, subject to a gift over us we say; but that, and that case, is only a person entitled to that income for life.

1555. But we have been rather dealing with trusts in the wider sense, as including the carrying out of wills, and the appointment of a public trustee as an executor and administrator, in addition to cases of settlements. Do you think that there would be any difficulty in a parallel procedure being applied for the purpose of winding up the estate of a deceased person, and administering it?—I see no difficulty at all in doing that.

1556. You gave an illustration of a family whose practice it was in their wills to direct that an administration suit should be commenced. That was, I presume, an opulent family who had a large estate, and to whom the cost was nothing in comparison with the great interests involved?—That is so.

1557. What do you say in regard to the case of small estates of 200*l.* or 300*l.*, or ranging from that up to 2,000*l.* or 3,000*l.*, which are really small estates. It would be impossible satisfactorily to deal in general with those cases under the present system in Chancery, would it not?—Yes, it could not be done under the present system.

1558. It would be very expensive?—Yes, it would be.

1559. So that you contemplate a real simplification and cheapening of the system at present existing, and to use the present machinery?—Yes, and I think the simplification is made possible by that exceedingly valuable section of the Act of last Session.

1560. When you have a judge in control, so to speak, you may safely allow him the freest possible hand, of course?—Yes.

1561. And you might leave the rule committee on any authority you think fit, as, for instance, the judge himself to draw up rules for the purpose of doing these things without the necessity of appearances in Court and all the paraphernalia of litigation?—There would be no appearances in Court in an ordinary case at all; it would all be done in Chambers, subject to this: that if there were a question of construction, as may, of course, constantly arise, then instead of commencing a new procedure, as you would have to do if you create a new department, you would simply utilize the existing one.

1562. In the case of the family whom you gave us an illustration, practically that family could afford to employ a public trustee in the shape of the Court of Chancery and the Paymaster General?—Yes.

1563. And they did so?—Yes, and they did so.

1564. I do not know whether you have thought out carefully (I have no doubt you have) what particular changes would be necessary in the rules of Court, or in the law to enable this system to be extended cheaply and widely?—I think they would be very few and very simple. The main expense has hitherto been that the

*Chairman*—continued.

Court of Chancery cannot divide the fund without strict proof of the persons who are entitled to the fund, and that involves, of course, proof of the marriage, proof of births, proof of deaths, and everything of that kind; whereas one knows in one's ordinary experience as a private trustee that an individual knows perfectly well who the children of the family were, and I should apprehend that in such a case as that, if the trustees wrote a letter, or something of that kind to the official, saying: "I have known the family all my life; there are only three children, and there is no need for any evidence on the point;" the chief clerk would act on that.

1565. Would it not be desirable in such cases to enable, or rather to encourage, the chief clerk, to consult with the family, and members of the family, or the solicitor, who is an officer of the Court of course, the family solicitor, and satisfy himself in a reasonable way without all the formality that is required now?—Certainly.

1566. And you do not apprehend that there would be any danger in that?—I do not apprehend that there would be any danger in that.

1567. In cases of trust, where a discretion is vested in the trustees, illustrations of which were given by Mr. Kimber, I think, in his questions to previous witnesses, do you think it would be difficult to entrust those in any degree to the Court under the circumstances?—I would not take away the discretion of trustees at all. If you take such a case as the common one of discretion to private trustees to make advancements for infants, the trustees would exercise that discretion, and would come to the Court and say, "We have exercised it," and an order would be made for payment out of the money.

1568. Then you contemplate the co-existence of private trustees with the administration of the estate by the Court of Chancery?—Certainly.

Sir *George Osborne Morgan.*

1569. You have suggested that at the instance of any person interested in a trust, the trust funds might be transferred into the name of the Paymaster General; but surely that is a matter with which the Court could deal by Rule?—Yes.

1570. No alteration of the law would be required for that?—No alteration would be required in the law, with this possible exception: I am not quite sure that Section 3 of the Judicature Act, 1894, is quite wide enough in spirit.

*Chairman.*

1571. I have a few more questions to put to you. I think you object to, or disapprove of the idea of a separate department being established for this purpose, as the department of an official trustee?—Yes, I must say I do; and I should like to state one or two reasons that have occurred to me upon that. In the first place it would involve, of course, the creation of a new department with an enormous staff, and, I say deliberately, with an enormous staff; because it must either be an enormous staff in London, or else there must be a great number of offices, each with a separate staff, in various parts of the country. I think, too, that it would be very costly.

*Chairman*—continued.

costly. I think further that it would be very hazardous, for it is a mistake to imagine that a public trustee in the sense in which the word is used can avoid acting through local solicitors and other agents, of whose capacity and whose fitness he, from the necessity of the case, can know nothing, but for whose acts he, or the public who are behind him, must be made responsible to the beneficiaries. And I venture also to think that the example of a small community, like that of New Zealand, is not really in point when you are dealing with a population like that in Great Britain, with trust funds, the amount of which must be calculated by hundreds if not thousands of millons, no one quite knows the amount; and moreover, dealing with such a numerous body of professional men of every variety of character and position throughout the country, whose merits or demerits cannot possibly be known to any one public official.

1572. You contemplate, in point of fact, a public trustee, but you do not contemplate a separate official or a department?—I should not use the term "public trustee." I contemplate a means of securing the capital of trust funds at the instance of any trustee who desires to relieve himself of that, or at the instance of any beneficiaries, who are minded that they should be made personally secure; but I do not contemplate any public trustee who would be associated with private trustees in the sense that he would be a trustee with them; for it does seem to me that the position of private trustees associated with a public trustee would be intolerable. For a private trustee not to be able to do anything without dancing attendance on a public office, I think, would be absolutely unworkable. All that you can properly require, I venture to think, is security for the trust fund. You must leave the powers of administration in the hands of the private trustees, and not hamper them by associating them with any other public official.

1573. Suppose that anyone wanted to create a settlement on marriage, we will say, or to leave money by will, would you enable him to say that he leaves it to the administration of the Court of Chancery, under the amended scheme that you suggest, under the amended law?—There is no difficulty whatever in that, of course.

1574. So that, in point of fact, you would allow the Court, through its official, the officer of the Court, to act in substance as the sole trustee?—Yes, in the sense of absolutely securing the trust funds, but not in the sense of exercising discretionary powers.

1575. I just want to make that clear; supposing I wanted to establish a settlement on my son when he married, containing the usual provision for children, if there should be any children, and for their advancement, which involves the exercise of some discretion, would you allow that I should say that I wish this thing to be done in the Court of Chancery, and I appointed the chief clerk (that is a mere matter of form, but it practically means under the care of the Court) so that the Court should do the whole work of the trustees, had there been trustees, without my naming any other trustees at all; would you contemplate that as



*Chairman*—continued.

possible?—It might be a little difficult to do that directly. There can be no difficulty in doing it indirectly, by appointing a trustee, and directing him to transfer it into Court.

1576. And then he would be relieved, except as regards the discretion?—Yes, and I should make this addition; that if the trustee says he declines to exercise the power, then the Court will exercise it for him.

1577. In that case, the direction being to the trustee, of course he should apply, and place the matter at once in the hands of the Court; but there would be some little risk in the interval, would there not, because the property, in law, would be vested in the trustee until he handed it over to the Court?—Yes, I think there are some difficulties of form in seeing how the matter could ever get into Court unless it went through some private individual first.

1578. Would it be difficult by legislation to say that any man should be at liberty to leave his will to be administered by the Court, and that, upon that taking place, the property should vest in the Paymaster General, and, upon vesting in the Paymaster General, it should be treated in the same way as Chancery property is?—I think there would be this difficulty, that so many estates comprise property in which there is liability. To that extent you cannot do it.

1579. Of course, it would have to be safe-guarded?—I think it is more than safe-guarding; it amounts to an exclusion. I see enormous difficulty in providing for the vesting of a whole estate in any trustee, just because of the liabilities.

1580. Supposing a man dies leaving no will, and leaving a large number of debts, and also large assets which involve heavy liability; we will assume bank shares, of which we have had disastrous experience in this country; in a case of that kind, what would happen. There would be an intestacy; what would happen practically; on whom would the liability rest?—There would be no liability, necessarily, in that case. Somebody, either the next-of-kin or a creditor, would take out an administration; he would be wise enough not to have the shares transferred into his own name; he would sell them, if he could, on the market, and if he could not dispose of them they would remain in the name of the dead man, and there could be no personal liability upon him, of course.

1581. Could not an arrangement be made, if it was desired to leave the estate in the hands of Paymaster General, we will say, to leave the will to be administered by the Court, so that, while saying it, should be vested in him, the Court should provide that it should not be administered by anybody else but, at the same time, preventing its being vested in him, so as to avoid any liability upon him; that would be a parallel case, would it not?—Possibly; but there would be enormous difficulties, I think, in dealing with, say, land and real property.

1582. That descends to the heir in case of intestacy, does it not?—Or leaseholds, which, of course, do not.

1583. But in substance, I gather that through a public officer (if you please to include a judge

*Chairman*—continued.

and the Paymaster General among the list of public officers) you would give the advantage of a public officer as the custodian, and, if need be, as the manager and as the controller of trust estates?—Yes.

1584. What do you say in regard to entrusting powers to county courts, for example, or to district registrars in the country, so as to bring the matter more readily to the doors of the public at large?—The great difficulty there is that there are registrars and there are registrars. There are some registrars, I have no doubt, who would be perfectly competent to deal with it, but there are other registrars who have not the experience of this sort of business, and to whom I think it might be dangerous to entrust it.

1585. Would you leave it in any sense to the county court judges; would you leave it to the discretion of county courts, in small estates at all events, in the locality?—I should see no objection to that. County court judges in the locality have now a limited jurisdiction of this nature up to 500*l.*; but I think they ought rather to be allowed personally to do this than to delegate it to officials, who cannot be expected to have the same experience, such as chief clerks.

1586. But you would not object to extending the limit of 500*l.* within reasonable bounds, would you, for the purpose of enabling smaller estates to be administered conveniently in the locality?—No, I see no reason why that should not be done.

Sir *George Osborne Morgan.*

1587. Up to what point would you extend that limit, to 1,000*l.*?—Offhand, I should see no objection to that.

1588. I am afraid that in the case put by the honorable and learned Chairman, of an executor selling bank shares, he would not get rid of his liability as representing the estate for another 12 months, would he?—That is so. My answer was only as regards his immediate personal liability.

1589. I understand that you would not make it obligatory upon the court to accept a trust in such a case as that put by the Chairman?—I do not think it would be possible to impose liabilities of that kind upon the court.

1590. We heard a good deal of evidence, on the last occasion when we sat, about the great success of the public trustee system in New Zealand; but I suppose you agree with me, it would not follow that because a system has succeeded in a country with little more than half a million inhabitants it would therefore be equally successful in a country like England, with 60 times that number of inhabitants?—That is entirely my view. I think the analogy really is not very useful.

1591. You said that the public trustee should be attached to the Chancery Division; would you attach him to the court of any particular judge?—No, I think not.

1592. Of course if the Paymaster General was utilised for the purposes for which you spoke, there would be no necessity for having a public trustee for that purpose?—No.

1593. You said that the yoking together of a public trustee and a private trustee, would in many cases create, possibly, intolerable friction?—Yes.

Sir *George Osborne Morgan*—continued.

1594. Of course there are certain advantages, and great advantages, one can see in the selection of a public trustee; on the other hand, I suppose you would agree with me, that very often a private trustee is enabled, not only to save great expense, as I think you told us, to the estate, by acting upon his private knowledge, but sometimes, by going a little beyond the terms of the trust, he is able to benefit the trust very greatly without incurring any real risk?—Yes.

1595. To put an imaginary case: Supposing that a man is trustee for a clergyman with a large family, whose wife has got 10,000*l.* settled on her, and supposing it to be invested in Consols, that would yield not much more than 230*l.* or 240*l.* a year, which, to support a large family, of course is a very small fund indeed; now, supposing the trustee happens to have been out in Western Australia, and knows, from his knowledge of the colony, that the Government securities of that colony are unimpeachable and likely to rise, and he takes upon himself to commit a breach of trust, and invest in those Government securities, do you not think that in that way he might greatly benefit the trust; of course a public trustee could never do that?—Nor do I think a private trustee ought to do it.

1596. Then I am afraid you cut the ground rather from underneath me; do you think that under no circumstances a private trustee, unless authorised by the trust, ought to invest in the very best colonial securities?—No, not until the law is altered, authorising it.

1597. Do you think he ought under no circumstances to do so?—I think so.

1598. Of course a public trustee could not possibly do that?—No.

1599. We were told by one gentleman that the appointment of an official trustee of charities had not in any way reduced the number of breaches of trust committed in the cases of charity funds; surely that is wrong?—It is quite impossible.

1600. Before the appointment of an official trustee breaches of trust by trustees of charities were an everyday occurrence, were they not?—Yes.

1601. And, practically, they have ceased since then?—Yes.

*Chairman.*

1602. The Attorney General used to spend his time largely in hearing informations, I believe?—Yes, and for this reason, that there were no beneficiaries to look after them.

Mr. *Warmington.*

1603. Generally it has been said that part of the difficulties that are now felt by persons as to accepting the office of trustee would be relieved if they were remunerated; do you agree with that?—No, I should rather regret to see a class of professional trustees.

1604. Again, it is said that there should be what

Mr. *Warmington*—continued.

what is called a judicial discretion to depart from the terms of the trust in special cases; do you think that that would be an improvement to the law?—Within limits, yes; it already exists, as you know very well, in relieving them from restraint on anticipation, which is a good instance of giving the Court discretion which the judges exercise with very great care and after very careful consideration of all the circumstances; personally, I should not object to see that power widened.

1605. It has been put in this way; for instance, to enlarge the area of investments prescribed by the settlement or will; that the judge should be able to do that?—I should regret to see that. The judges have got the power already to make rules enlarging the investment if they are so minded.

1606. Then again it has been suggested, with regard to the power of advancement; if a testator says that the trustee shall have power to advance, say to the extent of 1,000*l.*, do you think that the Court should be able to go further than that and say 2,000*l.*?—It is difficult to define the limits within which you could give such a dispensing power to the Court.

1607. But if the dispensing power were given, would it not in the natural course of events, after a few years become crystallised by decision?—Certainly.

1608. I want to put two or three questions, please, about the Court of Chancery. As a matter of fact, the Paymaster General is in no sense a trustee, is he?—No, except as custodian of the funds; that is all.

1609. He is more like, is he not, a cashier who honours cheques that are drawn by the Court of Chancery?—No, I do not think so. He takes directions given by the chief clerk or some official.

1610. He cannot of his own motion do anything?—No, that is quite true.

1611. He must have the sanction or order of the Court of Chancery for every payment that he makes?—He is a banker.

Sir *George Osborne Morgan.*

1612. He undertakes no liability, of course, no investment involving liability?—No, I endeavoured to make that quite clear; he does not take any security involving liability.

Mr. *Warmington.*

1613. That is true with a limitation, is it not. As a matter of fact, he does hold some securities on which there are liabilities; for instance, scrip; he does for the purposes of suits sometimes hold scrip, does he not?—Yes, he may; he has any number of boxes full of securities in that sense.

1614. Just in the same way as a banker does?—Yes.

1615. And a box cannot be opened except in the mode provided by an Order of the Court?—That is all.

1616. As to the funds, can you tell the Committee what proportion of the amount of 62,000,000*l.* is what we may call held by the



Mr. *Warmington*—continued.

Paymaster General under a living trust, and how much under deed trusts. Of course you understand what I mean by those expressions?—Yes. I cannot vouch for that.

1617. I do not think the Return shows that?—I do not think the Return does show it, but I think it would be correct to say that more than nine-tenths of it represents living trusts; I should have thought a great deal more than that.

1618. Money in the hands of the Paymaster General under dead trusts has been recently used for public purposes under the guarantee of the State, has it not?—Yes, that is so; but that is a mere matter of account-keeping.

1619. You would not suggest, would you, that any testator should be able to say: "I direct that the Paymaster General should be my executor"?—No.

1620. In point of fact there is an official who is sometimes in that position, is there not?—The President of the Probate Division you mean. I think Sir Francis Jeune sometimes is.

1621. Either he or the Solicitor of the Treasury; supposing that a man die intestate, having personal property, and there are no next of kin to be found, or at any rate none come forward, and no creditor comes forward to take out letters of administration, under those circumstances the Solicitor of the Treasury, who is a Corporation, takes out letters of administration or probate of the will, does he not?—Yes; but that, I apprehend, is because, under those circumstances, the Crown is beneficially entitled.

1622. It may be at the moment beneficially entitled?—Yes.

1623. He will hold the surplus, of course, after payment of debts, for the next of kin, if they turn up?—Yes, certainly.

1624. I want to put it to you from the point of view of the trustees rather than of the beneficiaries, that it is difficult to get a man who will be executor; do you not think that it would be better to allow some official under protection to prove the will or take out letters of administration?—I doubt very much whether there is any great difficulty in finding executors as distinct from trustees; and even if an executor should renounce, then one of the residuary legatees or persons entitled can claim and get a grant of administration with the will annexed.

1625. You forgot, I daresay; but, as a matter of fact, in recent practice, the Court has got nearer to being an official trustee than before; namely, in a case of this kind: a settlement of the share of the fund in Court is directed by the Court?—Yes

1626. Without appointing trustees it can, by an Order, declare the trusts by which that fund in Court shall henceforth be held?—Certainly.

1627. In that case, if there is any trustee at all, it is either the Court of Chancery or the Paymaster General?—Not the Paymaster General; it would be a Judge in Chambers.

1628. In that case there is no private trustee?—No.

1629. And has not that been found in small cases to act extremely well?—I think so.

 1630. And

Mr. *Warmington*—continued.

1630. And is largely made use of in small cases?—Yes.

Sir *Charles Pearson.*

1631. Do I correctly understand that your proposal does not involve the removal or supercession of the private trustees in any given case?—Not in the least.

1632. Then would the Paymaster General under your proposal be the mere custodian of the funds?—The mere custodian of the funds.

1633. And that mainly for the purpose of securing the capital absolutely?—Yes.

1634. I think you said that in the case of the Official Trustee of Charities, the funds under his control, amounting to 13 millions, were invested in consols; is that the only investment that he uses?—I cannot answer that question. I only just looked, in the Library, at the last Charity Commissioners' Report, where I think all the details will be found; but I caught the figure of 13 millions consols.

1635. Of course, investments in consols would operate very harshly if applied to trust estates with life intesests?—Yes.

1636. That harshness does not seem to be felt in the case of charitable funds so much?—I should not like it to be said that they are only consols; I do not think it is so; I believe there are many other funds besides.

1637. What is the practice of the Court of Chancery in a case where private trustees fail through deaths or resignations; how do they fill up the administration trusts otherwise than through its being put into the hands of the Court by one of the beneficiaries?—Supposing that there is one surviving trustee, he has by the general law, and quite apart from the instrument creating the trust, a power to appoint new trustees. If the last-named trustee dies then the estate vests in his representatives who have a like power to fill up the trust.

1638. Is there no case in which, failing the private trustees, the Court of Chancery appoints a person to a position analogaus to that of a Receiver?—The Court has ample jurisdiction to appoint a Receiver, and if a case like this happened,—that the trustee disappeared, or it was not known where he was, the Court would do one of two things. It has jurisdiction then to appoinit new trustees in the place of the man who cannot be found; and in the meantime no doubt, if necessary, they might appoint a Receiver.

1639. But does not the Court in practice exercise any alternative option to appointing new trustees except barely for the interim preservation of the estate?—I think not.

1640. Are you acquainted with the Scottish system of judicial factors?—Only in a very limited way; I would rather say not.

1641. So far as you know it, is there nothing analogous to that in the practice of the Court of Chancery?—I am really not able to answer the question.

1642. In the very large amount which you specified as in the hands of the Paymaster General, I think over 60 millions, do I rightly understand that there is not included the old

Sir *Charles Pearson*—continued.

Suitors' Fund, out of the interest of which the Law Courts were built?—That is only about two millions I think.

1643. I mean the capital; the capital was over 40 millions I understood; has it all been swept into the National Debt Commissioners' Fund?—It was turned into an annuity payable at a certain time. That is a mere matter of account-keeping of course.

1644. That is not included in the 62 millions, is it?—Yes, I think it is. As I understand, the Paymaster General credits the various estates with that 62 millions. On the assets on the other side, there is, in fact, a certain number of consols and other securities, and he has a claim upon the Treasury to make good the difference.

1645. Is it not the case that the larger proportion of the 62 millions must be funds of trusts which are practically dormant?—No, certainly not.

1646. At the present time, how is the Paymaster General advised upon points of law which arise in the course of his administration; has he standing counsel and a standing solicitor?—No; there are rules which regulate his Department; and he is bound to act upon, and indemnified for acting upon, a request, I think it is called, or an authority which comes to him from the proper department whatever that may be; it may be the Commissioner in Lunacy, or it may be the Chief Clerk in Chancery; but I have never heard that he had any legal adviser to assist him.

1647. Then he is at present a mere custodian of funds in the sense that you explained?—Yes, the bank.

1648. So that few questions of law would arise?—They would not arise for him.

1649. I mean for him. Supposing under your proposal, questions of law as to whether any given investments were within the Investment Clause; how do you propose that that should be settled?—That would be dealt with as it is now, by an Originating Summons. Every day an Originating Summons is taken out, and the trustees or the beneficiaries ask this simple question: Is it competent to the trustees to invest in such-and such a security?

1650. But such a summons in your contemplation would not be in any way connected with the Paymaster General's duties, but with the duties of the private trustees who are assumed still to exist?—Yes.

1651. So that your scheme does not touch the position of private trustees in any of those respects?—No.

1652. Am I right in supposing that you do not propose that any discretionary power contained in the Trust Deeds, and conferred on the trustees, should be exercised by anybody but the trustees? Except in one case which I referred to, where the trustees do not desire to act upon it, and then the chief clerk would; and also in the other case that Mr. Warmington reminded me of, in which the Court sometimes makes an Order defining the trust without having any trustee.

1653. But that involves no change in the present practice or law?—No.

1654. If

Sir *Charles Pearson*—continued.

1654. If that be so, why is it that you confined your suggestion to the case of the more simple trusts; is it not as easy and as necessary that the safety of the fund of complex trusts should be provided for in the way you propose?—I do not quite know what you mean by a complex trust.

1655. I mean that you preferred to confine your proposal to the cases of the most simple kind, namely, where there is a tenant for life, and a mere distribution after death. Why was that distinction introduced in your proposal if the main point is the safety of the fund, which is as important in a complex trust, and which in the case of a complex trust would be no more complex than in the case of a simple one?—I agree. The fund might be paid into the Paymaster General, and it might be afterwards necessary to provide for the payment of debts out of it; advertisements of debts have to be provided for; the fund is not clear until that is done, but what I meant to say was this: that I do not think it would be possible to have any scheme under which, say, a business could be carried on.

1656. That is the distinction you were pointing to?—Yes, that is one of the distinctions.

1657. You were not pointing to the complexity that one often sees in the case of family trusts?—No, they would be the cases which would be most likely to be brought in.

1658. They are the typical cases where the safety of the funds is necessary?—Yes.

1659. Your attention was drawn to the existence of discretionary powers in trusts, such as the ordinary power of making advancements for children, and so on. Under your proposal, the private trustees would be in exactly the same position as regards the exercise of such power as they are at present, would they not?—Yes.

1660. And the Paymaster General would have no concern with the mode in which the trustees exercised such powers?—No.

1661. Do you suggest, then, that in a given case of trustees having exercised a discretionary power in favour of A. B., the Paymaster General should be bound, or should be entitled, to give effect to the decision of the trustees at his own hand, and without communication either with the Court or the chief clerk?—No, he must be in communication with the chief clerk, because the Paymaster General's Department could not work for a day except on the theory that he can only act on the definite authority given him. As I say, he is the banker.

1662. It may be so as regards the Paymaster General's present position; but why should it be a part of your proposal that that position should be maintained in cases where the trustees still exist and are exercising a discretionary power within the limits of the discretion conferred upon them?—Because you must have some official to draw the cheque if you like, or to say that the authority has been given; and you have an existing department to do it (that is to say, the chief clerk's), and I can see no ground for manufacturing another department and attaching it to the Paymaster General's office. It would be mixing up the character of a banker with that of an administrator.



Sir *Charles Pearson*—continued.

1663. But at the present moment, trustees, having exercised such discretion, sign a cheque upon their own bank in favour of the beneficiary?—Yes, if the money is in their own hands.

1664. I fail to see why there should be any interposition in the case supposed of either the chief clerk or the judge in an ordinary case. Is it theoretically necessary because the money is in the hands of the Paymaster General?—Not only theoretically, but practically; it is actually there.

1665. But neither theoretically nor practically is it under the control of the Court in matters remitted to the discretion of trustees?—May I put a similar case which exists out of court? You may have a power given to the tenant for life to direct an advancement. The funds are not in the tenant-for-life's name, they are in the names of the trustees. The tenant for life, although he has the power, cannot draw the capital; he has to inform the trustees that he has, in the exercise of his powers, advanced 1,000*l.*, and then they have to give directions.

1666. Precisely, but without anything more; they do not submit it to the chief clerk; they obey the mandate of the person invested with the power?—So would the chief clerk.

1667. Why not the person in whose hands the money is?—Because the Paymaster General has not a staff of officials like a banker.

1668. But a banker is bound to honour the trustees' cheque in the case supposed?—Yes, undoubtedly.

1669. We come to this then: that if the person invested with the power had exercised the power, and intimated the trustees to that effect they would act without anything more?—The trustees have to vouch the fact that they have exercised the power.

*Chairman.*

1670. Would it be safe, or in accordance with practice, to allow the Paymaster General to draw a cheque on the general moneys in his hands on the authority of any private individual?—That would be absolutely impossible.

1671. It cannot be done without the authority of the Court?—Or of some department.

Sir *Charles Pearson.*

1672. That is only so with regard to the existing Act. My questions were directed to this: whether, under your proposal, there was any necessity whatever for maintaining that practice in the cases now to be brought within your scheme?—I think so. I think the Paymaster General's office would not work for a week unless that were done.

Dr. *Farquharson.*

1673. I think your impression is that the popular belief in the number of defalcations in private trusts is exaggerated?—Yes.

1674. Is that belief based upon those cases which come prominently before the public?—Yes.

1675. Is it not the case that there are a great many cases of defalcation that are kept quiet?—Yes; but making all allowance for that, I think still that there is a considerable exaggeration in the popular mind.

Dr. *Farquharson*—continued.

1676. And do you think there is exaggeration also in the alleged disinclination of private people to act as trustees?—Yes, I think there is.

1677. I suppose in your experience there is some disinclination?—No doubt.

1678. We have been told in this room that there is a growing disinclination; do you think that that is so?—It may be so. There is a difficulty, I quite agree; but we all owe certain duties to our kith and kin in the matter of trusteeship, and I think most of us are willing to discharge them.

1679. Do you think, putting these two things together, the possibility of loss, and the disinclination of private people to undertake the work, a case is made out for some change in the law or procedure?—I should welcome some means for the better securing of the capital of trust funds.

1680. And your proposed plan has the advantage of not creating a new department, but of utilising what is a going concern. But do you really think that you would not involve a very considerable addition to the expenditure of this department by the new duties thrown upon it?—No, I do not.

1681. So that, in that case, there would not be much burden to the trust in the amount of fees?—No.

1682. Do you think that the department would pay itself under the new conditions?—Yes.

1683. And if there was any surplus how would you appropriate that; would you put it into the Consolidated Fund?—At the present time there is a very considerable surplus from fees in the Chancery Division. Personally, I think it ought to be applied in the reduction of those fees; but it goes to the Chancellor of the Exchequer.

1684. You think it ought to be applied in the reduction of the fees; that is rather important. Would this official, the Paymaster General, be held personally responsible for any accident that happened to any of the funds under his charge?—No; there have been, I think, two cases; I only know of two (Mr. Warmington will correct me if I am wrong in that) in which money has been paid under a forged authority; but it is remarkable how little there has been of that kind.

1685. Who makes up the deficit in that case?—The Treasury.

1686. Supposing that under your plan some of the funds handed over to the Paymaster General disappeared by accident, would the nation have to make up the deficiency?—Yes; but I think the answer to that is, that there are 62,000,000*l.* now, and I think I am right in saying that the total loss certainly has been under 10,000*l.*, and the State has had a large profit out of this instead of a loss.

*Chairman.*

1687. In how many years has the 10,000*l.* been lost?—I should not like to tie myself to the 10,000*l.*, but the amount is mentioned in the return. I find here that for payments on forged signatures, from 1879 to 1893, the amount was

*Chairman*—continued.

4,380*l.*; that is nothing, of course, in a department of this kind.

Dr. *Farquharson.*

1688. Then you think that this new class of business would not involve any greater responsibility to the official in the way of danger?—No, I have no doubt that there would be a very considerable profit to the State unless the fees are reduced.

1689. And you think that the profit ought to be applied to reducing the cost of the trusts?—Yes, I think the fees are too high.

*Chairman.*

1690. It should be done for cost price?—Yes, within reason.

Dr. *Farquharson.*

1691. Perhaps you may have answered this already: Would the Paymaster General have the power to refuse any investment that he did not approve of? I mean in this way: supposing a trustee had carried out some of those judicious breaches of trust by putting money into a thing that looked well at the moment, but which might go wrong, would the Paymaster General have the power of refusing an investment of that kind?—He would not take anything on which there is a liability. He would take charge of the securities in any number of boxes; he would take certificates of bank shares; but he would not have them transferred into his own name. He is just like a banker; he would take custody of bonds, for instance, but you cannot transfer into the Paymaster General's name anything upon which there is a liability.

Mr. *Greene.*

1692. You told us that the instances of defalcation mainly arose from the existence of a sole trustee, or at least, that was your first head of it. Are you referring to a case in which the sole trustee has been a nominated trustee, or has become sole trustee by survivorship, or as the executor of the last surviving trustee?—As a rule, I should say, it is the case where one man is the sole survivor. It is not very usual to appoint a sole trustee, although it is done sometimes.

1693. Then the object of the settlor, or testator, or whoever he may have been, was that the funds should be guarded by more than one person?—Yes.

1694. Does it occur to you that it is desirable to carry out by legislation, so far as possible, the wish of the testator or settlor that the fund should be continued in the hands of more than one custodian?—I think it is very desirable, and at the present moment I should imagine that any beneficiary could require a new trustee to be appointed.

1695. But there may be cases where the sole trustee by survivorship, who has become so, I take it, by the operation of the common law, has the property vested solely in him, and can dissipate it or defalcate before the beneficiary has a chance of detecting it or replacing one of the deceased trustees?—Yes.

1696. Does it occur to you that it would be expedient

Mr. *Greene*—continued.

expedient to alter and clog the power of the surviving trustees, given to him by the common law, and to require that before he deals with property he should get the leave of the Court?—I am afraid that that would hamper transactions very greatly.

Mr. *Warmington.*

1697. It is not easy to say whether the man who is going to deal with bank shares or Consols is a trustee?—It is not possible.

Mr. *Greene.*

1698. From my view, it is immaterial whether it is known or not; but I think I may put it in the form of a question: Many companies have their stock and shares registered, but without any recognition of trusts, have they not?—All companies, you may say.

1699. Where a surviving owner of property, solely becoming the owner by survivorship, seeks to transfer it, why should he not be prevented from doing so without the leave of somebody; could there not be a provision introduced into the law to that effect?—I think you would cause disaster to a good many firms in the City of London if you did that. Many securities stand in the name of partners, and on the death of one of them it would be an exceedingly serious thing if the other partners were not allowed to deal with and realise those securities without coming to a Court.

1700. Could it not be arranged, in the case you suppose, that the mere production of the partnership articles would do; but I think you are wrong in this way: I have assumed sole ownership by survivorship?—True.

1701. Therefore, the other partners would be non-existent persons; there is only the one person, the surviving partner?—Yes.

1702. The production of the partnership articles would be sufficient for the purpose, would it not?—I do not know. You would have the Bank of England objecting to that very strongly.

1703. The Bank of England probably would object if the surviving partner had to go to them without the authority of the Court; but the Bank of England surely would not object if the Judge's order for transfer, which could be obtained in a few minutes from the clerk, was taken to them?—I should deprecate any change in the law which would alter the perfectly well understood state of things under which persons who hold stocks and securities as joint tenants take it in succession one after the other.

1704. Then, may I take that now to apply only to a case where persons are known to be trustees. Could you suggest any scheme by which the sole surviving trustee could be prevented from dealing with the property without some sanction of the Court?—The beneficiaries can get a *distringas*, and stop it now.

1705. But take the case of leasehold property, or real estate, or mortgages; what power has the beneficiary to prevent that being removed and dealt with dishonestly?—He cannot, because, ordinarily, the testator expressly empowers a sole trustee to sell.

Mr. *Greene*—continued.

1706. Take the case of a trust in which the *corpus* is represented partly by leasehold property, partly by freehold property, and partly by mortgages; the beneficiaries may find that the sole surviving trustee is in possession of all of them, and they may apprehend alienation; what can they do?—They can apply to the Court to have a new trustee appointed.

1707. Do you think it is desirable to provide that a person, finding himself sole trustee of property upon which a *distringas* could not be put, such as I have intimated, should be prevented in some way from alienating it without he obtains first the sanction of the Court, or the appointment of a new trustee?—I do not think that. I think it would greatly hamper perfectly honest dealing.

1708. Then, in your judgment, the position is incurable altogether?—No, I am anxious to safeguard the money when it has got to the hands of the trustee. I think that is to be done by vesting the capital in some official.

1709. Do you propose to make it compulsory on the part of any trustee to pay the money into the Court of Chancery, and to get its protection?—No. If one of the beneficiaries asks it, I think the Judge should make the order.

1710. But you would not compel a trustee, under any circumstances, to voluntarily do that?—No, I should deprecate that very much, indeed.

1711. Now, with reference to the question that was addressed to you by the learned Chairman of the Committee, he asked you whether it was possible to leave property to the Court, and whether, under your scheme, the Court of Chancery would take it up and administer it without leaving any executor named in it. Would there not be some difficulty in providing for the fees that would have to be paid?—I think so.

1712. And, under all the circumstances, your view would be not to permit the Paymaster General to deal with real estate or leasehold under any circumstances?—No.

1713. So that it is merely in cases of investment on personal security that you would give any protection?—Yes; and those are the only cases in which you get fraudulent defalcations.

1714. Surely you get defalcations in cases of sales of real estate?—Yes, but it is the money that is made away with; and the money would be made secure. Land is not made away with.

1715. But the fraudulent trustee surely pockets the proceeds of the sale, the money?—Yes, the proceeds.

1716. About the county court; the county court at present has unlimited jurisdiction in bankruptcy, has it not?—Not all the county courts; only a certain number.

*Chairman.*

1717. Selected county courts?—Yes.

Mr. *Greene.*

1718. Would you see any objection to giving them unlimited jurisdiction also in the matter of trusts?—Yes; I think it would be very undesirable. With the greatest possible respect to those who administer those courts, they are not

Mr. *Greene*—continued.

familiar with the sort of questions that would arise with trusts with unlimited jurisdiction.

1719. The power which Mr. Warmington mentioned, that is now exercised by the Court of Chancery, of acting as a sort of official trustee, would be equally applicable to the county court, would it not?—Within a limited amount, yes.

1720. Have you any reason for fixing 1,000*l.* only as the limit?—No; that was the amount I think some Member of the Committee suggested.

1721. Would there not be great practical difficulty in ascertaining what the limit of value of property would be for the purpose of coming within such jurisdiction?—It exists now, and if the property is found to exceed the limit it automatically comes to the High Court.

Sir *Henry Roscoe.*

1722. Your proposal has reference specially to the custody of the *corpus* of the estate?—Yes, and also to the easy division of the fund, which is then and there kept safe.

1723. But do you think that, apart from the cases of defaulting trustees, it is desirable, from another point of view, that a public officer should be appointed?—I think it is desirable to relieve the difficulty of honest trustees.

1724. In your evidence you have chiefly considered the case of beneficiaries; has it ever come under your experience that cases occur in which the private trustee may have to undertake very heavy and responsible duties from which he cannot well escape, and which he feels to be a burden, which ought hardly to be placed upon him as a private individual?—Yes, I have had many painful instances of that, such as where there is a trust to carry on a business. If a member of a family accepts a trust of that kind he finds himself in a position from which, so far as I know, no scheme has ever been suggested by which he can be relieved.

1725. But do your proposals, then, relieve the private trustee from that burden?—Not from that burden; but they would relieve him from the burden of taking care of, and investing and disposing of capital, moneys which are in his hands.

1726. But the main portion of the burden he has now to bear comes under other heads, does it not, or is found in another direction?—No, I should not say that.

1727. But you do not propose to relieve him of any of the other duties which now press upon him?—No, I do not. He can get a great amount of protection from the Court already. He may find himself liable to trade creditors when he is carrying on a business, and no scheme that I am aware of can possibly relieve a trustee from that.

1728. We have had given in evidence before us a proposal, which I think you object to, namely, that the official trustee, if such person were appointed, might be associated with a private trustee, and thus assist him and take some of the responsibilities from his shoulders?—I think that would be absolutely unendurable. I cannot imagine myself acting as a trustee with an official of a public department whom I should be obliged to consult on every conceivable occasion.

Sir *Henry Roscoe*—continued.

1729. But that would relieve him considerably, would it not, from responsibility?—No, I do not think it would; I think it would increase his trouble.

1730. But how would a private trustee, in your proposal, escape from having to carry on all the duties that belong to him, apart from merely taking care of the *corpus*, if he desired to do so?—Would you give me an illustration of what duties you mean?

1731. I mean the duties of administration?—The payment of the income to the tenant for life he would not be troubled with.

1732. You think your proposal would be a very considerable amelioration of the position of private trustees at the present time?—I think so.

Mr. *Arthur O'Connor.*

1733. I suppose you would not in any way propose to break in upon the distinction which now obtains between his judicial and administrative functions?—No.

1734. At present the judicial functions are entirely separate from the administrative functions, are they not?—No, that is not quite true in the Chancery Division.

1735. I was going to put it to you in this way: Is not the Chancery Division, like every other Court, set in motion by a party or person interested?—Yes.

1736. It does not move of its own motion?—No.

1737. Therefore, all that appears in the Return represents property which has come into the hands of the Court by payment into Court in cases which have been brought before it?—Yes.

1738. I notice that a great deal of the property in the hands of the Paymaster General on account of the Court of Chancery is property, or a form of property, in which private trustees would not be held to be justified in making investments?—Unless the terms of their instrument authorised them to do so. But you may be quite sure that the instruments creating the trusts did authorise the particular investments which are found there.

1739. Or it may be that some of these are intestate estates in which investments were already existing?—Yes, and the retention of which were authorised.

1740. For instance, there are a great many speculative companies' shares?—Yes, certainly.

1741. In which, of course, no trustee would be held to be justified in investing except under distinct directions in the instrument creating the trust?—Quite so.

1742. The public officer whom you suggest, either the Paymaster General or somebody else, would be attached to no administrative department, I understand; he would be independent of the existing administrative department?—Yes.

1743. And I take it your suggestion is that he should be associated in some way with the Chancery Division?—As he is now.

1744. As the Paymaster General is now?—Yes.

1745. But the Paymaster General only receives money I take it, or pays out money under order?—He receives money on a request, as it is

Mr. *Arthur O'Connor*—continued.

is called now, a request that he will receive money, which is initialled.

1746. But he cannot receive money from any casual person who happens to take it into his head to offer the payment, can he?—Yes, in some cases. A trustee can pay money in under the Trustee Relief Act.

1747. But that is under Statute?—Yes.

1748. That is provided for already?—Yes, but that procedure is almost out of date and obsolete.

1749. So that practically, as a matter of every day experience, the Paymaster General does not receive or pay out money except under order?—No.

1750. The new official or the Paymaster General, with his extended functions as suggested, would still have to require an order for the receipt or payment of money?—Yes, of course the public trustee must have some such order.

1751. Do not those orders involve settlements and procedure in connection with the Court that holds them, all of which costs money?—They would involve an application to the chief clerk, undoubtedly.

1752. The chief clerk is the Court?—Yes, he is an officer of the Court.

1753. I did not quite gather how you suggested, if indeed you did suggest, that it would be cheaper for the Paymaster General to make an application such as might be made under an Originating Summons, than it would be for a beneficiary or trustee or somebody interested under the present practice?—The case I desired to make before the Committee was this: that under the Act of 1894 there is a new statutory provision enabling the Rule Committee to sanction orders for the dealing with funds in Court upon less than strict evidence; and that is the main point.

1754. Now, whatever elasticity you might desire to introduce into the new functionary's powers, I suppose that, after awhile at any rate, there would be a danger of the duties being discharged in a perfunctory manner; that is to say, he would get into a recognised style and groove, and for his own sake he would be inclined to require clear evidence before he assented to any act?—The Paymaster General would have nothing to do with that. He would act upon the order or the notification, or whatever it might be called, from the judge acting ordinarily through his chief clerk. The chief clerk or judge would act upon such evidence as, under all circumstances, he thought reasonable, not being strict evidence.

1755. But, still, the chief clerk would require some kind of evidence?—Yes.

1756. The chief clerk of a Chancery Judge would know no more about the particular investment, or property, or family, say, than the consul in Kamschatka, until he were informed?—No; but I may suggest this: that if the Chairman of the Committee and myself were trustees of a fund, the tenant for life of which was dead, and we wrote a letter saying, "We had known this family all our life; there are only three children, and they are A, B, and C," the chief clerk and the judge would, and surely ought to, act upon that without any expense that is worth the name.



Mr. *Arthur O'Connor*—continued.

1757. That is to say, that in the exercise of his discretion the chief clerk should trust the private trustee?—Yes. The very object of this Act of 1894 was to give a power of that kind, which, of course, must be exercised under due responsibility, but still must be exercised reasonably and freely.

1758. Is that the full extent to which you would propose to extend or alter the rules under the Statute of 1894, or would you go further than that?—I should not like to tie myself down to that particular instance; I merely give that as an instance that occurred to me at the moment.

1759. Have you nothing further to suggest in the way of alterations?—No; that would be a matter for the Rule Committee.

1760. And, of course, anything that requires continued personal attention to the matter of the trust, or the exercise of continued discretion, would have to be left still, as it now is, to the private trustee?—Certainly.

Colonel *Howard Vincent.*

1761. I was not, unfortunately, here when you began your evidence, so you will, I hope, pardon me if I ask you any question which has already been asked you. As I gather from the answers that you have given to honourable Members, you are not opposed to the appointment of a public trustee?—I am not opposed to any arrangement that will secure the safety of the capital of trust funds; but I am opposed to any arrangement that will devolve the administration of trusts, as distinguished from their custody, upon a new official to be created.

1762. Your objection is rather directed against the creation of a new department than against the principle of the Bills which Mr. Warmington and myself introduced, and which both Governments have adopted?—Yes; but the principle of those Bills is the creation of a new department.

1763. You rather think that something might be grafted on to the present Court of Chancery which would meet all the requirements of the case?—It would meet all that I think can be reasonably or with advantage done.

1764. May I ask this question of a member of the Court of Chancery so distinguished as yourself: The general public is much afraid of the Court of Chancery and the delays which are assigned to it; circumlocution, are they not?—That was quite true as applied to the old days in the old Court of Chancery; but I believe at the present moment the delays in the Court of Chancery are much less than any delays in any Government Department.

1765. Speaking as an outsider, if I may say so, and without any personal feeling, would you, as a man of the world, think that a new institution connected with the Court of Chancery would have sufficient attraction for the public mind?—It would not be a new institution.

1766. Would not the public have a tendency to think, "It is some new thing of the Court of Chancery, and therefore we shall be throwing our affairs into Chancery"?—I think they would

Colonel *Howard Vincent*—continued.

learn very speedily, if they had not already learnt, that that is not so.

1767. One objection that you took to the experiment of a public trustee was that you thought it would be very costly?—Yes.

1768. I do not know whether you have read any portion of the evidence, for instance, of the learned Judges and others, who have come before us?—I have only seen it in the newspapers.

1769. Taking it very shortly, they think that the expenses of the office might be paid out of the fees. Is that your opinion?—Yes, I assume that they would be; but the point is that the expenses, which would be deducted from the income of the trusts, would be so very enormous as to be a very serious burden.

1770. But if that was so, then few trusts would be assigned to the public trustee. If the public found it expensive they would naturally hold their hand, would they not?—A trustee might very well desire to get rid of all responsibility without regard to the burden upon the beneficiaries. My scheme would not involve a penny of cost to the tenant for life, to the persons receiving the income.

1771. In your very wide experience you have come across, of course, many cases of breaches of trust?—Certainly, I am sorry to say.

1772. Involving very serious consequences to the *cestui que* trust and to the remainder-man?—Yes.

1773. And you think it very desirable that something should be done to correct that state of affairs, which is very unfortunate, and particularly so for those who are unable to help themselves?—Yes; I am afraid human nature is such that trustees, and agents, and brokers, and all kinds, as long as the world lasts, will always misappropriate.

Colonel *Howard Vincent*—continued.

1774. I understand you to say that you thought the difficulty of finding trustees was rather exaggerated?—Yes, I do think so.

1775. I heard you say that you thought trusteeship was a duty which we owe to our kith and kin?—To a certain extent.

1776. But if persons, as respectable as yourself and myself, were inundated with applications to act as trustee, as I am sure you are, would not that imply a great deal of difficulty and danger to beneficiaries by our becoming old and leaving the country, or from the burden of other affairs, being unable to attend properly to the trust?—I am not impressed with that.

1777. But do not you think that it would be a great advantage if persons would appoint a trustee who would never die, never leave the country, never misappropriate, and always be there?—I do not know. Such a person must be a corporation; he must act through agents; he must act through persons who will die.

1778. But the office would be perpetual?—That only means keeping the capital intact.

1779. But you think it is very essential that something should be done to keep the capital of trusts intact?—I think that is very desirable.

1780. And your suggestion is, instead of the creation of a new Department, an increase of the present machinery of the Court of Chancery?—To utilise and improve it.

*Chairman.*

1781. The Court of Chancery does administer now largely, does it not?—Enormously.

1782. It is generally supposed that the Judges do not administer; but that is a popular delusion, is it not?—Yes.

Mr. John Robinson Adams, called in; and Examined.

*Chairman.*

1783. You are a member of the well-known firm of West, King, Adams, and Co., Solicitors, in the City of London?—I am.

1784. And I believe you have given attention and thought to this and kindred questions relating to trusts?—I have.

1785. And you have had a large experience in trust matters of various kinds?—That is so.

1786. What do you say in regard to defalcations. I am not speaking of defalcations by any particular class of men; but, generally speaking, are there fraudulent defalcations to a large extent by trustees, do you think, or not?—There is no doubt that there are very large defalcations, although I am inclined to agree with Mr. Cozens-Hardy that they are exaggerated.

1787. You mean that the public mind fastens upon particular instances of a fraudulent character, and infers that there is a much larger number of them than there really is?—Yes. Of course, there are no means of ascertaining what the proportion is; but I should think that the proportion is less than is supposed. Still they do exist very largely, there can be no doubt.

*Chairman*—continued.

1788. Do you regard that as a serious matter requiring consideration, and an endeavour, at all events, on the part of Parliament, if we can, to try and remedy it?—Certainly.

1789. You think that it is a proper subject for the consideration of the Legislature?—Yes.

1790. Do you think that these defalcations exist largely in great estates?—No, I should not think they do. I should think it is mainly in small estates; so far as they have come under my own notice they have been in small estates.

1791. Where plunder and robbery (for, of course, it is robbery) take place in large estates, then, of course, there is a noise and bustle, and everybody hears about it; but do you think that the public hear much of the defalcations that take place in these small properties?—No, I do not think they do. I think there is a disposition in the majority of cases to hush the thing up, and for the beneficiaries to get what they can. That was so in a case in which I myself was concerned recently, where the defaulting trustee was a solicitor, who has since been struck off the Rolls. I may say that I had personally very great

*Chairman*—continued.

great difficulty in getting the proceedings initiated that resulted in his being struck off the Rolls; the parties interested were very unwilling to move, and it was only from the fact that I had myself to make an affidavit for use in the proceedings that I asked Mr. Justice Stirling to direct the matter to be sent to the Incorporated Law Society, and that the proceedings led to the end I have mentioned. That was the case of a small estate.

1792. I suppose it often happens where there are fraudulent breaches of trust that the parties who have been wronged expect that by silence they will get more than they will by activity?—Most people are afraid of legal proceedings in any shape; they think that they had better get what is left, and not waste money in attempting to punish the wrong-doer.

1793. Then, I suppose, in many cases the robbery takes place on the part of those who are relations, and the consequence is that there is a family disinclination to make it public?—That is another reason.

1794. At all events, you hold the opinion, which is shared, I may tell you, by several distinguished Judges who have come here, that it is a serious question?—Yes.

1795. Have you thought at all how you would remedy that, what public facilities you could give in order to reduce the evil?—I think that one of the means of doing that would be the establishment of some public official who could be intrusted with the charge of trust property. Whether it should be through a public trustee, or whether it should be, as Mr. Cozens-Hardy suggested, by some addition to the powers of the Court of Chancery, is a matter for consideration altogether; but I have found, even among my own clients, an inclination, if it were possible to do so, to have some trustee other than a private trustee. I had one case not very long ago of a man of large property who desired to appoint one of the public companies that exist for the purpose. I dissuaded him from that for reasons which I need not go into, and he appointed three trustees, one of whom was a banker, and who was asked to take the position, and had it explained to him beforehand; and I have no doubt that the particular disposition took place in that case mainly because that gentleman had expressed his willingness to act. When the testator died that very gentleman declined to act, and the result is that the estate is now left in the hands of two trustees, whom I am quite sure the testator would not have entrusted with the funds alone if he had known that the one he particularly desired to act would not act.

1796. Do you find that there is much difficulty in getting people to act as trustees?—There is considerable difficulty. I, myself, was appointed by the Court of Chancery a trustee under a marriage settlement, owing to the difficulty of getting trustees of the ordinary character. It is not usual, as I think most people know, for the Court to appoint solicitor trustees, but in that I was appointed, and am acting in a large estate.

1797. You have found in that, as an instance, and in other cases, that there is a disinclination



*Chairman*—continued.

to accept the burden?—A very great disinclination. And there is a disinclination on the part of testators who want trustees to ask their friends to be trustees.

1798. One honourable Member has asked me to follow up rather what you stated: you said that in one case you were appointed trustee by the Court of Chancery. That must have been an estate of some considerable amount, I presume?—Yes, there are three other trustees; I am one of four. The property was considerable, and the lady was an infant, and therefore the settlement had to be through the Court.

1799. That was the case of a marriage settlement?—Yes, and the young lady was under age, and therefore the settlement had to be through the Court.

1800. My honourable friend the Member for Aberdeenshire wants me to ask you whether such an opportunity would be available to a small estate. It could not go into the Court of Chancery, could it, with any prospect of coming out successfully?—No. It is a simple matter of expense, and in that particular case the expense was no object.

1801. We have been told by Mr. Cozens-Hardy, and I think you have been present this morning, that there is machinery at present existing which is already available for large estates; but what do you say in regard to the present system as it affects small estates; would it be practicable to work through the Court of Chancery, at present, small estates without losing a very large portion of them?—The expenses are very considerable in any case, and the expenses are not nearly in proportion to the value of the estate. It costs just as much to get business through if the estate is one of 1,000*l.* as it would be in the case of one of 100,000*l.*; except that possibly in one case applications in Chambers before a Judge might be attended by counsel, and in small cases they might not. But there is no discrimination, except that there is a lower scale of costs for matters under 1,000*l.*; but practically that is of very little use.

Sir *George Osborne Morgan.*

1802. There are different scales of costs, are there not, higher and lower?—I believe so. I do not profess to know much about costs, but I think there is a lower scale, and I think 1,000*l.* is the limit.

*Chairman.*

1803. In substance you can already, with some outlay, administer a trust now, in Chancery, I suppose?—Yes; that is so if the judge will allow it to be administered. You first of all have to satisfy him that it is necessary to have what is called a general administration. Formerly, before 1882 I think it was, anyone could take an estate into Court, and many of them were put there, and many of them remain there now, although there is not the slightest necessity for their so doing. I may mention that in this particular case to which I have already alluded, of a gentleman who wanted to appoint one of the companies as executor, he, finding that he could not do that, put a clause in his will directing that the estate should be administered through the

*Chairman*—continued.

Court, showing his strong desire that in some way or other the trustees should be controlled. That was not done, because we knew that if we went to one of the judges and described the simple character of the trust he would say, "I am not going to be bothered with this; take it out of Court."

1804. Mr. Cozens-Hardy told us of a family in whom it was habitual and apparently hereditary to direct that the estate should be administered in Chancery, and you instance another case of a will in which the same direction is given. You suppose that that arises from the desire to have real security for the capital fund?—Unquestionably that was so in the case in my own office. The gentleman only died within the last two years; it is a matter that I have personal control of.

1805. Perhaps you have not thought out fully the method, the machinery, by which it might be effected; but do you think there would be any difficulty in gratifying that desire by amending and adding to the proceedings in Chancery, so as to enable an estate to be administered, if people wanted it?—I think it could be done easily enough.

1806. Do you incline in favour of having the present system in Chancery adapted to the new use, or do you rather incline to having the department of a public trustee?—The answer to that question is a little difficult; it would depend very much upon the way in which the new department set about its work. The system in the Court of Chancery, with which I have been familiar for a good many years, is certainly one that leads to a very great delay and expense, and in many cases gives very great dissatisfaction. If a public trustee, such as I gather is contemplated by the various Bills I have seen, were given sufficient powers, and were himself a strong man inclined to see whether he could not strike out a new line, I think great advantage might arise from that; but if he is merely to fall back into a groove like the Chancery groove, I do not see that there is much to choose between the Court of Chancery and a public trustee.

1807. Would it be possible to associate a public officer as public trustee with the Court of Chancery, making him an officer of the Court of Chancery, so that any necessary control might be exercised, and any necessary directions obtained?—I think that there would be considerable practical difficulty in doing anything of that kind.

1808. What course do you think ought to be adopted?—Speaking generally, the line adopted in the various Bills that have been brought in, the general line, seems to be the right thing to do, namely, to have somebody who would become a trustee of the estates of persons who desired that they should become so. I take it that the thing must be entirely voluntary; there must be no attempt to coerce people to use it; and then if the expenses are kept within bounds and there is no attempt to make a profit out of the thing, I should think that the public trustee would be a very satisfactory new departure. And I am fortified in that view by the fact, which is, of course, known to the Committee,

*Chairman*—continued.

that there are several public companies already in existence for the purpose of doing this very class of business. One of them is directed by very leading members of the Incorporated Law Society; another is the well-known, rather too well-known, Trustees' and Executors' Company, and I think there are several others. And there have been various attempts made, I believe, from time to time by these companies to get Parliamentary powers to act as executors. I have not seen any of their Bills, but I suppose there is some reason why they come and ask for Parliamentary powers. And as to that, my view is, that any company that does not confine itself entirely to the business of trustee and executor, but mixes up finance or any other business which is likely to involve loss of capital, should not have any special Parliamentary powers given to it. I think it would be a very great mistake to allow any trading company, or speculating company, to have any powers except such as the law now gives.

1809. Have you had any personal experience of any of these companies?—Not in any way that I think the Committee is dealing with. I have had to do with one; I think it is called the Law Guarantee and Trustee Company. A private business in which I was concerned was turned into a public company; debentures were issued, and the Law Guarantee and Trust Company guaranteed those debentures, satisfying itself beforehand that its guarantee was practically not needed, because the property was of sufficient value itself.

Sir *George Osborne Morgan.*

1810. That is not in any way a finance company, is it?—I am not speaking of that as a finance company.

*Chairman.*

1811. As I understand, your objection to public companies mixing up finance with trusteeship does not arise from your making any suggestion that they have in point of fact alienated trust funds, but because as a matter of public policy you do not think it is desirable?—Quite so. I believe that in the case of the Trustees' and Executors' Company all the trust funds under their control are quite intact, and there is no risk of that; but it is what I might call bad form for a company of that kind, the business of which was not really trustees and executors, but something else, should even be allowed to call itself by that name; it is misleading to the public.

1812. But you do not suggest of course; in fact you say you believe that their trust funds are perfectly intact, and that they have not at all dealt improperly with them. I quite understand that you meant that; but you think, as a matter of public policy, that if any company are to be empowered by a special Act of Parliament to carry on business of a trustee or executor they ought to be prevented from taking speculative business at the same time?—I go so far as to say that they should not be allowed to do anything else but the class of business for which they seek those powers. I believe that there is a large

*Chairman*—continued.

large and profitable field open for a company of that kind.

1813. Do you think it would be desirable to leave duties of that kind, seeing that the necessity has arisen in a certain sense from the condition of the law, to private enterprise, or that it is a matter that should be excluded from a public undertaking?—No, it would be certainly more satisfactory to the public generally if a business of that kind should be done through a public functionary with the guarantee of the State behind it, rather than by a private company which might or might not have the necessary means to make good its engagements.—A private company to have any chance of success would want a very large capital uncalled and a very small capital called; and the very best possible men to direct it who could be found; and even then it would take a long time to make way with the public, I think. Still something of the kind is wanted, and all these companies are doing more or less of this kind of business; I mean private trusts as distinct from debenture trusts, or anything of that nature.

1814. Do you think that the expense would be an obstacle. Do you think that the amount of trust money that would come in would be of such volume that a small charge would be sufficient to meet the expense; or do you think that the expense would be a very formidable matter?—I do not see why the expense should be so formidable. In the first instance, I take it that an office of that kind would not pay its expenses; but those are all matters for the people who propose to use it. If a man, knowing beforehand that there is a public official, and that the use of that public official would cost so much in respect of his estate, chooses to commit his funds to it, I do not see why he should not be allowed to do so, why it should not be facilitated.

1815. What do you say in regard to the utilisation of the district registrars or the County Courts with their County Court Registrars?—I personally do not like it any more than Mr. Cozens-Hardy did. As he said, there are registrars and registrars. One's experience is, that in country districts a good deal goes on that would not be sanctioned for one moment in London. I am not speaking without actual experience. It seems to me that it would be necessary to have a central office, and that the work should be done, so far as it is country work, through agents. On the other hand that would, no doubt, tend to a block of business in the London office.

1816. But you would have a central office with local branches?—I do not see how that is to be done, that would be a matter that would have to be dealt with in future. In the first instance you must have one office in London, at any rate; and if the business grew, and it was found necessary to have branch offices, they could be established, if wanted.

1817. You would begin on a modest scale, but in a manner capable of expansion as necessity required?—Yes.

1818. Do you apprehend that in the first instance any considerable charge would be required if you were to appoint an entirely new



*Chairman*—continued.

public trustee with a staff to begin with?—I do not think so; and unless he is an entirely new official I do not think he would be of much use. You want to strike out a new line; you want a new man if it is done at all.

1819. I understand that while agreeing with Mr. Cozens-Hardy in thinking that it would be convenient to have some available official, you rather deprecate its being a remodelling of the judicial system, but prefer to have an official trustee?—I do for the reason that I have said. I think it is a new thing and must be started by a new man. It is very difficult to get people in the position of chief clerks to strike out a new line; one has found that by experience; I do not wish to say anything against them; they are mostly men whom I know very well; but there again there are chief clerks and chief clerks. Some will assist you in trying to save expense; others will put you through the groove and say, "Never mind, this is the proper way to do it, and you must do it." Perhaps they are right.

Sir *George Osborne Morgan.*

1820. Then you differ from Mr. Cozens-Hardy in preferring to have this public trustee attached to a new department?—I do.

1821. May I ask whether you have read the Bill introduced by my honourable friends Colonel Howard Vincent and Mr. Warmington?—Yes, the Committee Clerk sent me the three Bills that have been introduced, and I have looked through them.

1822. Speaking generally, do you approve of the principle of that particular Bill?—Yes, speaking generally.

1823. As to these public companies, of which you spoke, are you aware of any breaches of trust that have been committed by them?—No, I do not suggest anything of the kind.

1824. But still you would go as far as to prohibit even such a company as the Law Guarantee and Trust Company, which is not a finance company, from doing even that guarantee business?—I think the guarantee business is risky.

1825. You would confine all these companies purely to administering trusts?—Yes.

1826. Would you give them power to act as executors and administrators?—Yes, certainly; there is no practical distinction between trustees and executors and administrators.

*Chairman.*

1827. You include "executors" in "trustees"?—Yes.

1828. In the evidence that you have given, I mean?—Yes.

Sir *George Osborne Morgan.*

1829. You have spoken of the difficulty of getting persons to act as trustees; do you think that that would be diminished if trustees were allowed a small remuneration or percentage upon the work which they did?—I do not think it would; and what is more, I have a strong feeling against paid people, whether trustees, Members of Parliament, county councillors, and the like.



1830. You

Sir *George Osborne Morgan*—continued.

1830. You are altogether opposed to trustees having any remuneration?—Yes.

1831. You spoke of the delay and expense in appealing to the Court of Chancery for administration; that has surely been greatly diminished, has it not?—No doubt, and can be still further diminished. It depends, as I said just now, without meaning any imputation on any of the officials, to some extent upon the particular official that you get before.

1832. You are aware, of course, that the county courts have jurisdiction to administer estates up to 500*l.*?—Yes.

1833. Would you be in favour of extending that jurisdiction?—I do not see any particular use in the limit.

1834. As I understand, your proposal would be to have a central office in London with different branches all over the country?—No, I rather dislike the idea of districts; but that is the sort of thing that would prove itself. If it was found that the London office had a large amount of country business and there was sufficient to establish a country branch, it could be done, say, in large towns like Manchester, Liverpool, Leeds, and so on; but that is a thing that would grow of itself.

1835. You would proceed tentatively?—Certainly.

Mr. *Warmington.*

1836. A great deal has been said about the defalcations of trustees; but is there not a very considerable sum for which trustees have been made liable, not because they have dishonestly put the money into their own pockets, but because they have departed from the letter of their trust?—Yes.

1837. And the sum represented by the liability of trustees for such acts is very large?—I should infer so in the aggregate.

1838. Probably that would be one of the main reasons why persons are a little reluctant to accept the office of trustee?—Certainly.

1839. And one of the advantages of appointing a public trustee would be, would it not, that there would be no such breaches of trust; or, if there were, there would be a guarantee that no loss would accrue to those beneficially interested?—That, I take it, is the sole benefit at the bottom of this proposal.

1840. And therefore it is not merely to protect beneficiaries; it is really to relieve trustees or to relieve the public?—I hope both. If it protects the beneficiaries it does relieve the trustees, of necessity.

1841. Do not you think that it would be an advantage that the persons beneficially entitled should have a ready means of access to the person who has to deal with the trust funds?—Just so; that is why I said you wanted a new man and a strong man.

Sir *Charles Pearson.*

1842. You spoke of the large number of frauds by trustees which have been brought to notice; can you classify them in any way so as to give us an idea of what are the more common

Sir *Charles Pearson*—continued.

forms of such fraud?—I think Mr. Cozens-Hardy gave you what I should agree with in the main; it is the sole trustee, the man who is left as sole trustee of a fund where there have been other trustees in the first instance.

1843. What shape does the fraud usually take; is it using trust money, either for his business or pleasure?—Using trust money either for his business or pleasure, and continuing to pay the income.

1844. The capital in the meantime having disappeared?—Yes, that is the common form, as far as I know it.

1845. Then, the objection founded upon the frequency of such frauds would be largely obviated, would it not, provided you could get the capital kept intact?—No doubt. There is not much risk of the income being misapplied; it is the capital that goes.

1846. You heard Mr. Cozens-Hardy's proposal for the keeping intact of the capital while retaining the actual administration of the trusts in the persons of trustees?—Yes.

1847. What do you say as to that meeting your difficulty?—What I gathered Mr. Cozens-Hardy's proposal to be was this: that the capital should somehow or other be brought under the control of the court, either paid into court or transferred into court, that the trustees should be left as they are now, but that when anything is wanted out of court again in the shape of capital there would be the necessity for an application to somebody, the judge or chief clerk, and an order would be made on which the Paymaster General would act.

1848. What do you say as to the extent to which that obviates the difficulty, or the frequency of fraud?—I am afraid that if it were left to trustees it would lead to this: trustees are very nervous people, and facilities of that kind would induce many trustees to say, "We will not trust ourselves, or those who will be left, if some of us die; we will hand this money into court." And then nothing could be done without the court with regard to either income or capital.

1849. Do you mean by your illustration that they would hand the money into court otherwise than to the Paymaster General as a mere custodian?—I mean nothing but that; that is what I understood Mr. Cozens-Hardy to mean.

1850. When once he has got it under the new proposal, why should it be necessary that either the court or the chief clerk should interfere when money has to be paid out by the Paymaster General upon the requisition of trustees who, by the assumption, are still left in the saddle?—One can only answer that by saying that it has never been the practice to do so.

1851. But you desire a new practice and a new man, you say?—Yes.

1852. Does it not occur to you that there might be a new department of the Paymaster General's office, confined to the cases of trusts still existing in the persons of private trustees, and obeying their directions in matters which have been left to their control and discretion?—Do I gather the point of the question to be that the

Paymaster

Sir *Charles Pearson*—continued.

Paymaster General should act, so far as the income is concerned, or the advancement of capital upon the instruction of the trustees?

1853. Why not an advancement of capital, it being assumed to be left to their discretion, under the new proposal, whether that capital shall be advanced or not, and the only difficulty being that it exists in the banking account of the Paymaster General?—But how is the Paymaster General, in that case, to know that it is in their discretion? I will put it more generally. If the law is that certain trustees may pay in funds to the custody of the Paymaster General, and the Paymaster General has to act upon their directions as to what they do with the money, whether it is capital or income, it is obvious that they may some day take it into their heads to draw it all out again and make away with it.

1854. He must satisfy himself, in the first instance, that the request is within the power of the trustees?—Not only that, but that they are making the request in the performance of their duty, and not with any other motive.

1855. But do you regard the position as one in which the Paymaster General would review their discretion?—He must either review it, or he must be protected if he acts upon it. I do not see how any such plan would protect the funds. If the same people who pay it in are at liberty to draw it out when they please, you might as well not pay it in at all.

1856. Then your general assent to the Bills which have been tabled involves, as I understand, in all cases falling within the proposal, the transfer of the administrative powers of the trust to the new official?—Yes, certainly; that is to say, if the person who creates the trust wishes it. I do not go so far as one, if not more than one, of the Bills goes, that the trustees themselves may transfer it; I think that would be rather dangerous, at any rate without the consent of all the persons interested.

1857. And all the beneficiaries under the will, or all the persons interested in the settlement?—Yes; I do not think it would be desirable to give trustees of their own motion the power to pay the funds into court, either under the present system or under a new system, merely to relieve themselves of responsibility.

1858. How do you regard the proposed new official as acting in the exercise of discretionary powers under a trust?—There is one obvious difficulty in the proposal.

1859. But is it possible to solve that satisfactorily?—I have thought about that, and I only see one way in which it could be solved with anything like satisfaction, and that would be by the adoption of some plan in the nature of a family council.

1860. As in France?—Yes. If an advance was wanted for a child, a public trustee could not grant it without the same process as is adopted now in the Court of Chancery.

1861. And, of course, the difficulty would be very greatly aggravated where the office was centralised in London?—Certainly; you must relieve the public trustee from that in some way or other.

1862. Mr. Cozens-Hardy's proposal relieves



Sir *Charles Pearson*—continued.

him from it absolutely, because he is never entrusted with it?—He throws it upon the court again.

1863. No, he throws it upon the trustees?—Yes, but he still leaves them to go to the court if they think fit.

1864. As they can under the existing practice?—As they can under the existing practice, I am sorry to say in too many cases when there is no necessity for it. When the will is clear, and their powers are clear, and they are protected in every way, I have known cases where trustees have insisted on going to a judge. Then you get exactly the same position as you would have with a public trustee, because the judge himself must be instructed. The trustees know that there are so many children entitled to so much, and that it is for their benefit that so much should be given to them by way of advancement; but the judge can only know that when he is informed in the usual way by affidavit or evidence.

1865. And it is necessary to secure that, if the order of the judge is to protect the trustees afterwards?—Yes.

1866. You spoke of certain companies existing for the purpose of taking up such business; do you know whether any existing companies in England confine themselves to the line which you thought they ought to be confined to, or whether they all take financing as part of their business?—I do not think any of them confine themselves to trust business. Everybody knows, of course, what the Trustees' and Executors' Company did.

1867. And, so far as you know, none of them are pure trustee companies?—I do not think there is one. I am not sure whether there is one in Scotland. I think I had a prospectus once of a company called the Trustees and Executors, Limited, or something of that kind.

*Chairman.*

1868. The Public Trustee, Limited?—Yes, I think they did confine themselves to that.

Sir *Charles Pearson.*

1869. You said that you dissuaded a client from appointing a company as trustee; was that on general grounds, or on grounds personal to the company?—Not personal grounds, except from the fact that it was a company carrying on another business which was well known to be a financial business.

1870. Have you considered whether that difficulty might not be allowed to solve itself on the lines of such companies confined to proper trustee and executory business?—I have considered that very much, and have myself prepared a scheme which has been laid before leading men in the City, and is at this moment under consideration, for the simple purpose of doing trust and agency business; that is to say, nothing that by any means can be treated speculatively.

1871. Agency in the way of managing estates, do you mean?—Yes; agency in the way of managing estates, receiving rents, and such like things, which involve very little pecuniary responsibility.

1872. And you would look without apprehen-

Sir *Charles Pearson*—continued.

sion to the development of that class of companies if they were put under proper regulations?—Certainly.

1873. Have you considered whether the obvious difficulties in the way of the creation of a new public department might not be obviated by the development of companies, on some such line?—Companies, in my mind, would be the best, but for the one circumstance that you do not get the absolute security that you get through a public trustee.

1874. Absolute security of capital?—Yes. A public company may have the very best men to begin with. We know that is the way it is done. You get a proper scheme, but gradually the thing drifts into other hands, and, rightly or wrongly, certain things are done. Because trustees are not the only people who commit judicious breaches of trust. Companies very often do the same, and get into business which they are not empowered to take.

1875. Could not that be obviated by a stringent outside audit?—I do not think an audit would help it a bit. I do not believe in audits, if I may say so.

*Chairman.*

1876. I have heard it said that it is only a question of time when every company and every firm in England will come to an end; that is to say, when it gets into the hands of some person who is unequal to the great burden. So, would it not be the same in the case of a company; it might get into bad hands?—A company may do wrong, just as a trustee may do wrong; but I do not think an audit would help you a bit. I think the present system of audits is practically a delusion.

Sir *Charles Pearson.*

1877. Including public audits?—Certainly.

1878. And not excluding those that have been imposed by the Legislature upon various classes of public institutions?—It is next to impossible for an auditor to know what he ought to know. I am speaking of what I know. I have had to suffer from audit.

1879. But what audit?—In my own office we had an auditor, and we paid him a decent salary too, and we were robbed; and when the discovery was made, the auditor said "I thought I was dealing with an honest man"; I said "We did not pay you so much a year to think anything about it." Since then I have had to do it myself, and have come to the conclusion that there is no man in the City of London, or anywhere else, who can tell that everything is right; it is next to impossible, unless he is at it every day, which no auditor can be. Take a bank auditor, he must assume that the information given him from time to time is correct; he cannot check it at all; and it is just where he does not check it that the mischief goes on.

Sir *Henry Roscoe.*

1880. Would you propose that the public trustee, whom you desire to see appointed, should be able to associate himself with an ordinary or private trustee. We heard from the last witness that in his opinion it was not

Sir *Henry Roscoe*—continued.

desirable, and indeed, impossible?—I quite agree with him.

1881. You think that there must be either private unpaid trustees, or that the whole matter must be turned over to the public trustee?—You must put the responsibility somewhere; you cannot divide it.

1882. But how about carrying out the administrative matters which the public trustee would not be able to manage?—That would only mean that the particular trust could not go to a public trustee at all, that it must remain a private matter.

1883. Is not that then the case with nine-tenths of the trusts?—No, I do not think so. I think a very small number, comparatively, have trusts of that nature, such as the carrying on of a business.

1884. And in that case it would not be possible for a public trustee to carry them on?—Certainly not.

1885. He ought to have power of refusal in any cases of that sort, you think?—Certainly.

Mr. *Greene.*

1886. If we are to have a public trustee, or public official, can you offer any suggestion as to the mode of his remuneration; could it be done by commission, or must it be done by salary, or would the expenses rather be calculated by commission?—Do you mean as regards the expenses to the trust funds?

1887. Yes?—I am afraid there is only one way of doing that, and that is by agreeing on a commission. I believe that is the system adopted by companies that do that business now. Of course the largeness or smallness of the commission would depend upon the size of the estate.

1888. You have no instance, have you, of a company limiting itself to trust business obtaining adequate recompense by charging a commission?—I know of no instance where a company does limit itself to that business; and I have no doubt at all that whether it is a public trustee or a company of that kind, in the first instance the business must be carried on at a loss; and it is only when the public get confidence in the one or the other, and bring in business to a large extent, that you get enough to pay the expenses and leave a profit.

1889. Having regard to the fact that it costs as much to administer an estate of 1,000*l.* as it does to administer an estate of 100,000*l.* in the Court of Chancery, do you think it would be possible for the Committee to suggest a scale of remuneration or percentage, or a scale of charges?—I apprehend that the Committee could not or would not suggest the system that is adopted in the Court of Chancery; that is, simply a question of fees for issuing summonses and drawing up orders and that sort of thing, that would not be wanted in nine cases out of ten.

1890. But the strong man whom you suggest might, after more thought, have fixed for him a certain scale on which he could do the business, might he not?—I do not think he could do it in any other way than by commission of some kind; there

Mr. *Greene*—continued.

there might be certain fees on very definite matters. It would develop gradually, of course; but I apprehend that most people who would use this system if it were adopted would consider it in this way: I am going to put 100,000*l.* into this, and it will cost so much either on the capital or on the income, by way of percentage, and they would make the calculation accordingly.

1891. You think that would work practically?—I do not see any other way to work it. To leave it as a question of fees, like the fees taken in the Court of Chancery, would be an impracticable system.

1892. Supposing that it is not possible to have a public official, can you suggest any mode of increasing the security of trust funds, and saving them from these defalcations, or any alteration of the law that is possible?—No, I think not. Under the existing law, any person interested can go to the court; or, short of that, there is the system of *distringas*. Of course, it does not apply to land; but land is not so easily got rid of as money. But the curious thing is that, even with existing trusts, where people have got the power, they do not make use of the *distringas*. Say that a will leaves 100,000*l.* in Consols in four names, every beneficiary, if he likes, can put a *distringas* on that; I need not tell you, but there is not one in a thousand that does it.

1893. I am going to suggest three cases that may be possible. In the first place, would it be possible to make a statutory provision with regard to the custody of documents, title deeds, and so on, which should be obligatory upon a sole trustee?—It is quite possible to make a statutory provision, but it is not possible to secure that it shall always be complied with.

1894. Secondly, would it be possible to compel the rendering of periodical accounts by the trustee, half-yearly, say, not only for the protection of the beneficiaries, but for his own protection, because by passing the account he gets an acquittance, and on the other hand the beneficiaries get the information that their trust is being administered?—There would be no difficulty about providing for that; in fact, it is provided for under the present law. Any beneficiary can go to the court and ask to have an account brought in.

Mr. *Greene*—continued.

1895. I am suggesting a compulsory rendering of trust accounts. Just as a company renders accounts every day, why should not a trustee?—I see no difficulty.

1896. Do you think that that would check fraud?—I do not think it would; and I think in nine cases out of ten it would not be attended to. As a rule, you find people are satisfied if their trustees are what they usually are.

1897. Can you make any suggestion with a view to preventing a sole trustee defalcating and misappropriating the funds in his custody?—None, except taking them out of his custody.

1898. Perhaps they are gone before you get the chance?—What I want to express is this: you may have as many legislative directions as you please; but unless there is somebody to see that they are carried out they will not be carried out very often.

1899. My suggestion is, that there should be fresh legislative provisions made, and I have suggested one or two, that do not exist at present?—But unless at the same time you invent somebody whose business it is to see that they are carried out, they will not be carried out. I am not sure whether I am correct, but I think that in Scotland these things are much more carefully done than they are here. Sir Charles Pearson mentioned this morning something about judicial factors. I think judicial factors are required to render accounts regularly, and that those accounts are audited in a way that no trustees' accounts are audited in the Court of Chancery. Practically the passing of accounts in the Court of Chancery does not do much more than vouch the payments. I have a friend, my brother-in-law, who is one of the leading accountants in Scotland and he says that our system of taking accounts in the Court of Chancery is a solemn farce.

*Chairman.*

1900. In regard to rendering balance sheets and having annual audits, I suppose that all the defrauding companies that have been exposed within the last ten years have had published balance sheets, and have practically had audits?—No doubt there is no difficulty in presenting a balance sheet and getting it audited.

*Monday, 25th March 1895.*

MEMBERS PRESENT:

Mr. Attorney General.
Mr. Butcher.
Dr. Farquharson.
Mr. H. D. Greene.
Mr. Kimber.
Sir Charles Pearson.
Colonel Howard Vincent.
Mr. Warmington.

MR. ATTORNEY GENERAL, IN THE CHAIR.

Mr. TREVOR THOMAS LETHEN OVEREND, Examined.

Mr. *Warmington.*

1901. You are, I think, President of the Incorporated Law Society of Ireland?—I am.

1902. Does that stand in a similar position to the Incorporated Law Society in England?—Yes, in a similar position.

1903. You have, I presume, had extensive experience of the practice of the law in Ireland?—Yes, for 19 years I have been a solicitor.

1904. And has that experience been occupied with the administration of trusts?—To a very considerable extent.

1905. Both of real and personal estate?—Both of real and personal estate. Trusts in Ireland are chiefly of real estate; the main property in Ireland is real estate.

1906. I suppose that there are wills and family settlements under which stocks and shares are held?—Yes; but, speaking generally, the bulk of the property in Ireland is landed property. Of course, there are very considerable personal trusts also.

1907. With regard to real estate, I suppose you would agree that the difficulties which have been put before this Committee do not obtain anything like so strongly as with regard to trusts of personal estate?—I do not exactly know what those difficulties are.

1908. The difficulties, as we have been informed, are, firstly, the difficulty of finding trustees; and, secondly, the loss of trust property?—In Ireland my own experience is (and I have made considerable inquiry on the subject) that there is actually no difficulty in finding new trustees either for real or personal estate.

1909. And, with regard to the loss of trust property, has there been much trust property in your experience lost?—In my own personal experience I only know of three cases where property has been lost by misapplication, to which I understand you to refer.

1910. Yes, I will take that first?—I have only known of three cases where property was lost by misapplication.

1911. And in those cases was the property vested in one trustee, or in more than one trustee?—In two of the cases it was vested in one trustee.

1912. Was it lost through a real crime?—I do not know; it was very hard to say that. The result was the same, the money was misapplied. Being familiar with the circumstances myself, I do not think there was any fraud intended in any of them; but, as a matter of fact, there was misapplication.

Mr. *Warmington*—continued.

1913. Was it an honest mistake then?—I will not say that; in the two cases that I spoke of it was where the property was sold out and applied by the trustee, and not forthcoming.

1914. Was that a settlement of personal estate or land?—It was personal estate.

1915. And in a case in which there was more than one trustee, how did the loss occur?—I do not know exactly how it occurred. There were two trustees, and whether there was any collusion between them I do not know; but that was a case where money was paid out of court to the two trustees, and one of them received it, and it was afterwards not forthcoming.

1916. That looks like defalcation?—Yes, it does; that particular case undoubtedly was defalcation.

1917. Where land has been the subject of the trust, have you known of any loss other than that which has arisen from the diminution in the value of land?—Yes, I have.

1918. How does that arise?—That arises mainly from the course of land legislation in Ireland, and the effect upon the value of the land as diminishing the security for funds lent upon it; that is the chief cause of that.

1919. Have you known of cases in which the land has been realised and the money received by the trustee and misappropriated?—No.

1920. That very seldom occurs, does it?—In my experience it is a very rare thing indeed.

1921. A suggestion has been made by some of the witnesses who have given evidence before us, that the law might be amended by allowing trustees a remuneration; is that your view?—I do not think that would be a very acceptable view in Ireland. The trusts there are not of very great extent as a rule, and the trusts have, generally speaking, been carried out, so far as the trustees are concerned, free of expense. I do not think that that would be a very desirable thing.

Mr. *Warmington*—continued.

1922. Is that, do you think, not only the view of your profession, but also of the public?—I think that would be the view of the public, so far as I can form an opinion.

1923. I ought perhaps to have asked you this first; is the law as administered in trust matters in Ireland the same as it is in England?—I believe it is practically the same.

1924. Is there any feeling in your profession that the law is too strict with trustees?—Yes, we think it is too strict.

1925. Can you suggest in what way you think the rules could he relaxed?—I think they should be relaxed in the direction of placing a trustee in he same situation as any prudent man managing his own affairs. I do not think that a trustee should be responsible for any default that arises from a *bonâ fide* mistake; I mean for a mistake made when he was acting *bonâ fide* in the execution of his trust.

1926. I daresay you have had your attention directed to the proposal for the appointment of a public or official trustee?—Yes.

1927. Do you recollect your society considering the proposals in 1891, 1892, and 1893?—I do not think they considered them then; they considered them in 1890; they did not consider the last Bill which was brought in, so far as I recollect. The last Bill is the Bill I have here; that was ordered to be printed on the 11th of April 1894.

1928. Introduced by whom?—Introduced by Colonel Howard Vincent and Mr. Warmington.

1929. Was not there at the same time a Bill introduced by the Chancellor of the Exchequer?—Yes, but I have not a copy of that; I am aware that there was one.

1930. Upon those Bills did your society pass any resolution or make any report?—They did not make any report upon the Bill of 1894.

1931. Did they upon the previous Bill?—Yes, they did.

1932. Could you oblige the Committee with a copy of the report?—Yes, I have it here (*handing in the same*). This report is on the Public Trustee Bill in the House of Lords, and on the Public Trustee Bill in the House of Commons, and also on the Trust Companies Bill in the House of Lords, and is dated 26th of March 1890.

1933. The Trust Companies Bill was, I think, a Bill to establish companies, under the Joint Stock Companies Acts, to become trustees and act as trustees?—Yes.

1934. Since 1890 has the subject been under consideration by your society?—Yes, it has been under consideration within the last week.

1935. And are the views now entertained by your society the same as those which are expressed in this report?—They might be somewhat modified and altered in regard to the difference in the terms of the two Bills; but I am not in a position to say how far that modification might be, except that we have discussed the matter within the last week or 10 days, and the views of the council on that point are very much on the lines of my evidence, a note of which I have handed in. But they have made no actual formal report on the subject since 1890.

1936. The objections of your society go to the principle, do they not, of having any public trustee at all?—They do,

1937. Perhaps another Member of the Committee may ask you some questions upon them. The report itself deals with matters of detail, I see?—Yes, arising on the consideration of the Bill.

1938. Do you think that those matters of detail are matters which could be met by amendment?—It is very difficult to answer that question, because, when you come to consider the frame of the Bill, some of its most important provisions are to be carried out by rules.

1939. One of the great objections, I suppose, from looking at the report, would be the expense which your society think would be incurred?—Yes, that is one of the objections.

1940. You know, do you not, that it was part of the proposal that it should be entirely optional to accept or appoint a public trustee?—Yes.

1941. Do you think that in Ireland, assuming such an officer were created, much use would be made of him?—I do not, so far as I can form an opinion.

1942. Was there not another proposal of a similar character made in 1893 which was limited to Ireland?—Perhaps you are alluding to a Bill to have the assignees of the Court of Bankruptcy appointed official liquidators of public companies, and so forth?

1943. Yes; and that was a proposal to establish an official who should not only be assignee of the Court of Bankruptcy, but also official liquidator of public companies, of executors and administrators of estates, and of managers of the estates of lunatics?—Yes, it had that general purport.

1944. Could you tell the Committee whether that Bill was a Government Bill or a Private Member's Bill?—I cannot recollect.

1945. Was that particular Bill considered by your society?—Yes, it was.

1946. And what were the views of your society as to it?—I have here a printed copy of the resolutions upon that Bill.

1947. Will you kindly hand them in?—Certainly (*handing in the same*).

1948. Was that Bill of 1893 considered by any other society?—Yes.

1949. By what society?—It was considered by the most important assembly of merchants that we have in Dublin, the Chamber of Commerce, and they passed a resolution very strongly condemning it.

1950. I think that Bill of 1893 was not proceeded with, was it?—It was withdrawn.

1951. Was it read a second time, can you tell me?—I am not quite sure whether it was read a second time or not; I know it was withdrawn. I am reminded that it was read a second time (*handing in the Bill*).

1952. The Bill, then, was introduced in the House of Lords by Lord Acton?—So I understand.

1953. And the Bill went through the Committee of the House of Lords?—Yes; but it was subsequently withdrawn.

1954. Do you know whether there were any communications

Mr. *Warmington*—continued.

communications between your society and the promoters of that Bill of 1893?—There were not any communications between the promoters of that Bill and ourselves.

1955. In the report of your society of the 19th of April 1893, reference is made to the Report of the Parliamentary Committee. I suppose that is the Parliamentary Committee of your body?—Yes.

1956. Have you got that report?—Yes, here it is. (*Handing in the same.*)

1957. Could you give the Committee, on behalf of the profession in Ireland, any suggestions by which the law might be amended with regard to the liability of trustees?—Yes, we have considered that question. With regard to the question of loss of trust money, by misapplication, it has occurred to us that there is a comparatively simple, indeed, I may say, a very simple, and in fact inexpensive way, by which the tenant for life, or other beneficiary, could prevent dealings with trust funds by trustees without the knowledge of the beneficiaries, and that procedure would be, by an amendment of an order which is one of the orders in Ireland in 1891, under the Judicature Act. Rule 4 of that Order has this provision: "Any person claiming to be interested in any stock standing in the books of a company may, on an affidavit by himself or his solicitor, in the Form No. 27 in Appendix B., with such variations as circumstances may require, and on filing the same in the proper office, with a notice in the Form No. 22 in the same Appendix, with such variations as circumstances may require, and on procuring an office copy of the affidavit and a duplicate of the filed notice, authenticated by the seal of the court, serve the office copy and duplicate notice on the company." Then there are a few notes of details as to how those notices shall be served, and then Rule 9 proceeds to state, "A notice filed under Rule 4 of this Order may at any time be withdrawn by the person by whom or on whose behalf it was given, on a written request signed by him, or its operation may be made to cease by an order to be obtained by motion on notice duly served by any other person claiming to be interested in the stock sought to be affected by the notice." There is a rule that follows, Rule 10, to which I wish to direct the attention of the Committee, and about which we have a proposal with regard to the rules which I have just read; and that rule is this, "If, whilst a notice filed under Rule 4 of this Order continues in force, the company on whom it is served receive from the person in whose name the stock specified in the notice is standing, or from some person acting on his behalf or representing him, a request to permit the stock to be transferred, or to pay the dividends thereon, the company shall not, by force or in consequence of the service of the notice, be authorised, without the order of the court or a Judge, to refuse to permit the transfer to be made or to withhold the payment of the dividend for more than eight days after the date of the request. The suggestion that we have to make is that if that Rule 10 were omitted altogether from the rules, there would then be a perfect security, because the word "company" there

Mr. *Warmington*—continued.

has a glossarial meaning; I have not got it here, but at all events it is intended to apply to all banks and companies whose shares are held and would be held by trustees. It will be seen that if Rule 10 is taken out the *distringas* is perpetual, and can be withdrawn in only two ways, those two ways being, of course, the ways in which it ought to be withdrawn; that is to say, the first way is that it can be withdrawn by the person who put it on; and the second is, that if he does not choose to do so, it cannot he taken off except by motion or notice duly served by any other person claiming to be interested. The effect of that, of course, is that the stock could never be dealt with by the person in whose name it is standing so long as that stop remained on it. That, I say, would result by removing Rule 10, which immediately follows, the effect of which is practically to let it be dissolved at the termination of eight days. I should like to draw the attention of the Committee to the fact that the rules I have just read are precisely similar to the rules under the English Act.

1958. You refer to the familiar practice of proceeding in the nature of a *distringas*?—Certainly.

1959. But you cannot issue a *distringas*, can you, unless you have the particulars of the stock upon which it is to operate?—Clearly not.

1960. Does not the loss of trust funds arise in cases where the beneficiary does not know what the trust fund consists of?—Yes, but when the trust is created that information is at hand. What we suggest is that that provision should be very generally applied.

1961. Take, for instance, a marriage settlement; the funds then exist?—Yes.

1962. And none but a beneficiary can place a *distringas* upon them?—Any person interested might do so, but it would be, of course, a beneficiary.

1963. It may be that 20 years after a settlement has been executed, some person beneficially entitled to the corpus may desire to know what the trust fund is and to secure it?—Yes.

1964. A reference to the settlement will not do that; he must know the precise funds held by the trustees, must he not?—Clearly; but if a *distringas* was put on at the time of the creation of the trust the funds would be there.

1965. Is what you mean that every trustee should himself place a *distringas* on?—No; the person interested in the trust, the tenant for life or the settlor, either of them might.

1966. But, again, take the instance of a marriage settlement, and assume that there is an understanding between the trustee and the tenant for life; it may be years before there is a person either born of the marriage or otherwise entitled to the corpus?—Yes.

1967. During the whole of that time the money is liable to be lost, is it not?—You are taking a case of collusion; that is to say, that the tenant for life might withdraw the *distringas*.

1968. Yes?—Yes, that might be so; but that would involve two persons being guilty of a criminal offence.

1969. Quite so?—It involves, in fact, a conspiracy.

1970. You

Mr. *Warmington*—continued.

1970. Would you then make it obligatory upon the tenant for life to place a *distringas* on?—We have not gone that length.

1971. If you do not, where is the security to those who are entitled to the corpus?—It is the interest of the tenant for life to do it, therefore it follows that it is the interest of the remainder man, unless in a case of collusion.

1972. Again, trust funds at the time of the settlement may consist of consols, and the settlement allows a change of investment to colonial securities. The identity of the settled funds would be a little obscure, would it not, if a change of investment had been carried out?—Not more obscure than it is now.

1973. But then would you want a new *distringas*?—Yes, I think so. That is a very simple matter.

1974. As a matter of fact, speaking from your experience, do tenants for life put a *distringas* upon settlements in which they are interested?—No, I think not; they rely almost altogether upon the trustee.

1975. As a matter of fact, do persons who are entitled to the corpus which is subject to a life interest put on a *distringas*?—No, my experience is that that is not so.

1976. And yet it is your experience that where the interest of beneficiaries has been sold to a company, the company makes it a standing rule to place on a *distringas*?—Yes, they do, when they deal with it as a matter of security, and complete the title in that way.

1977. And even when the purchaser is a private person, I do not wish to pry into your own business, do not you advise a stranger who is purchasing an interest under a settlement or will to place a *distringas* upon the funds?—I think, as a rule, that would be good advice.

1978. Is there any other suggestion which you would like to make for the amendment of the law?—We think also that, following the analogy of the Settled Land Act, no receipt for capital moneys should be valid if signed by single trustees, except in cases where only one trustee was appointed by the instrument creating the trust.

1979. Do you think that rule would be sufficient?—We think it would be a very great addition to the security of trust funds.

1980. How are you to know what capital moneys are, or are not, subject to the trust; how is a company to know?—It is land we are talking of.

1981. But the suggestion is with regard to personal estate, as I understand it?—No, this suggestion is peculiarly applicable to Ireland, where the trust funds mainly consist of land.

1982. But with regard to personal property, one of the great difficulties is to ascertain as to whether or not it is trust property, is it not?—Yes, sometimes a trust is left apart from the assignment; and, of course, that applies to securities that are in the hands of companies.

1983. It is the recognised practice to keep trusts off the settlement, is it not?—Yes, off the settlement, but not altogether with regard to land.

Mr. *Warmington*—continued.

1984. Surely not; but you would not go so far back, would you, as to alter the law of personal property so as to make it similar to that of land?—No. Our suggestion on that point would meet a considerable number of cases.

1985. It is hardly wanted with regard to land, is it; you have got it already?—Yes, to a certain extent you have got it already.

1986. The receipt for the money must accord with the title, must it not?—Yes. We also suggest that provision might with advantage be made for the audit of trust and administration accounts upon the lines laid down in Section 18 of the Judicial Factors Act, 1889, which is a Scotch Act, and by the extension of that Act to the case of instruments *inter vivos*. On that point I would like to read to the committee a letter which has been addressed by a firm of gentlemen who, I understand, are practitioners of eminence in Edinburgh, Messrs. Gillespie and Paterson. It is a letter addressed to the ex-president of our society, Mr. French, and it says: "We have received your letter of the 16th instant regarding the auditing of trust accounts. There are two officials in Scotland before whom accounts may come. There is the auditor of the Court of Session, to whom are remitted all accounts in dispute before the court and the accounts of expenses of litigants. The auditor's report upon such accounts is not final, but may be objected to by the parties and discussed before the court. Besides the judicial accounts, the auditor does a great deal of extra-judicial taking of accounts; and, as his method of dealing with accounts is generally adopted by the court, it has to be considered that accounts audited or taxed by him are practically finally approved of. These extra-judicial audits, however, only proceed upon the consent of parties, such as trustees and beneficiaries, or agents and clients, and one party cannot compel another to submit to the auditor's taxation or to abide by it. The other official is the accountant of court; and, regarding his appointment, we refer you to the Act 52 & 53 Vict., c. 39. This official has the supervision of the accounts of all judicially appointed factors to pupils, incapable persons, and lapsed trusts. He reports upon the accounts submitted to him and insists upon their being duly kept. It does not follow, however, because the accounts of a factor have passed the accountant, that the beneficiaries are thereby precluded from questioning his management. The Act of 1889, to which we have referred you, provides, Section 18, that all testamentary trustees may apply to the court to be put under the superintendence of the accountant. In our experience, however, that section has not been largely taken advantage of. We do not know that there is anything more that we can add. The confidence of the profession in the late auditor (Mr. Edmund Baxter, W.S., who died lately) led to a great number of questions being submitted to him for his decision by agreement between parties. His successor has not yet had time to gain the same confidence." The section of the Act to which those gentlemen allude is as follows: "Section 166 of the Bankruptcy (Scotland) Act, 1856, shall be and is hereby repealed, and in lieu thereof be it enacted

Mr. *Warmington*—continued.

that where a person deceased has left a settlement" (and that word "settlement," I think, applies to a will in Scotland, and that is the reason why we suggest its being extended to *inter vivos* instruments) "appointing trustees or other persons with power to manage his estate, it shall be competent for such trustees or other persons to apply to the Court of Sessions for an order on the accountant to superintend their administration of the estate, in so far as it relates to the investment of the estate and the distribution thereof among the creditors of the deceased and the beneficiaries under the settlement, and the court may grant such order accordingly; and, if such order be granted, the accountant shall annually examine and audit the accounts of such trustees or other persons, and at any time, if he thinks fit, he may report to the court upon any question that may arise in the administration of the estate with regard to any of the aforesaid matters, and obtain the directions of the court thereupon." We think that that would be a very advantageous provision.

1987. Probably a member of the Committee who is acquainted with the practice in Scotland will ask a few questions upon that; but I should like to ask you one question: Do you suggest that the audit of trust and administration accounts should be optional at the instance of either trustee or beneficiary, or that it should be compulsory?—We rather suggest that it should be voluntary.

1988. At the instance of either trustee or beneficiary?—Yes.

1989. By "audit," do you mean an audit of the accounts or an audit of the estate?—We mean both.

1990. An audit of accounts would merely mean the going through the cash received and cash paid?—Yes, I imagine.

1991. But you mean that the audit should extend to ascertaining and reporting upon the existence at the time of the trust funds?—Yes, I think that would be advantageous.

1992. I rather gather that the certificate of the auditor would go to this, would it not; as to whether at the time of the audit the trust funds were found consisting of proper funds?—Do you allude to the certificate of order under this section?

1993. Yes?—You mean funds invested within the terms of the trust.

1994. Certainly?—Yes. I think the section might be construed in that way. I think that the words will go so far as that.

1995. Supposing that a public trustee were appointed, do you think that there would be use made for him; that is to say, do you think that he would have much to do so far as Ireland is concerned?—It is a difficult question. So far as my own experience goes I do not think he would. I have spoken to some very representative gentlemen in Dublin, not professional men at all, and they have given me very strong opinions against it.

1996. It is right, I think, to put this question to you. If such an official were appointed, do you think it would be well or not well to allow him to act in Ireland, or should he be confined to England?—I should prefer his being confined to England.

1997. Do you think that would be the view of your profession?—Yes.

1998. And also the view of the public?—With regard to the public, so far as I can form an opinion, there is absolutely no demand for it. Notwithstanding all the Bills that have been introduced into Parliament (and several Bills have been introduced), and notwithstanding that there has been a very considerable correspondence in the *Times* and other papers, and the publication of evidence taken before this Committee, I am not aware of a single letter having been written to an Irish newspaper on the subject, or of a single meeting having been held or a resolution passed by any public body giving the smallest consideration to the subject one way or another. And if we can form an opinion, derived from any action of the steps they would be likely to take, we have it in the resolution of the Chamber of Commerce, composed of the leading business men in Dublin.

1999. You refer to the resolution in 1893?—Yes; but that was, of course, only an analogous measure. There is no desire for a public trustee at all in Ireland, and any persons I have spoken to have given very strong opinions against it. So far as I can understand it, the Committee have been already informed by other witnesses of the grounds of objection, they are very much what have occurred to us, namely, that a public trustee would really, as an official, be bound to act upon very strict evidence, quite different from the manner and the evidence upon which a private trustee (who, as a rule, is a member or a confidential friend of the family) acts.

2000. It has been suggested by a very high authority, Lord Justice Lindley, I think, that that difficulty could be surmounted by allowing him to act upon other than strict evidence. What would you say with regard to that?—As well as I recollect Lord Justice Lindley's suggestion, it was that he should act upon such evidence as should appear to him to be reasonably sufficient.

2001. Yes?—It occurred to me, with the very greatest respect for his opinion (and I am sure there are abundant grounds for it), that when you come to examine that proposition, it is very hard to know what evidence a public trustee would consider reasonably sufficient. There is sometimes a very great difference of opinion as to whether the evidence that would satisfy an ordinary official is or is not reasonably sufficient. I think that leaves the question very much where it was.

2002. But you would not allow any person, trustee or official, to act upon evidence other than what was in his view reasonably sufficient, would you?—Clearly not; but the evidence that would satisfy an absolute stranger to the trust, and who was responsible to the Government, might be quite different from the evidence that would satisfy a private trustee.

2003. Arising from the difference of personal knowledge?—Arising very much from the difference of personal knowledge, and from the evidence not being considered on official lines, which

Mr. *Warmington*—continued.

which has always more or less a tendency to assume a highly technical character.

2004. Is there anything further that you would like to suggest?—I do not know that I have any other suggestion to offer.

2005. I ought, perhaps, to ask you this: How many members are there in your society?—In the year 1894 there were 1,382 solicitors on the Roll; that is to say, there were 1,382 practising solicitors; and of those 506 are members of the Incorporated Law Society.

2006. And does your society have jurisdiction to inquire into cases of malpractice by solicitors like the Incorporated Law Society of England?—Yes, and our jurisdiction extends over the 1,382 members, not merely over the members of the society.

2007. Your society has authority to inquire into this matter?—Yes; not the same authority as the English Society has. The English Society's power of inquiry is under a comparatively recent Act of Parliament by which it is given to the Committee of the Law Society. There is a Bill pending in Parliament at present, which has been introduced by Lord Macnaghten in the House of Lords, and has passed the second reading, supported by the Lord Chancellor on behalf of the Government, giving precisely the same powers to the Irish Incorporated Law Society. But, practically, that is only a method of procedure, because all cases involving professional misconduct come before the society on the complaint of an independent person who does not always come to the society, and is not necessarily bound to come to the society, but might make his complaint by process of independent petition to the Court of Chancery; but if that happens the judge refers the matter to the society before it is acted on. As a matter of fact, and as a matter of practice, all cases dealing with professional misconduct of solicitors come before our society itself; and we invariably appear before the court on behalf of the society, with our views as to whether the solicitor ought to be punished or not.

2008. You then inquire into the matter?—Yes.

2009. And express your views more for the assistance of the court than otherwise?—Entirely; that is the way it is done. Any application to strike a solicitor off the Rolls comes before the court; and, as a rule, it is brought on by our society, though the law does not necessarily oblige it; but we always appear, whether it does or not.

2010. Have there, in the last 10 years, been many cases in which solicitors have been brought before the court for malversation of funds?—From the 1st January 1885 to the present date there were 11 solicitors struck off the Rolls for misconduct, out of whom only one was struck off for misappropriating funds of which he was a trustee; he was the administrator.

2011. Then from 1885 to the present time there has only been one case?—Only one case in which a solicitor, in his capacity as trustee, has been struck off.

2012. Is it familiar in Ireland that a solicitor should be a trustee?—Yes; it is a very common thing.

2013. And as much with regard to the settlement of personal funds as of land?—Yes. I have very frequently been asked to act as trustee myself.

2014. And have been tempted?—I have refused in several cases.

2015. And in some you have accepted?—Some I have accepted. The cases I refused were on the grounds that I had not time to attend to them.

Sir *Charles Pearson.*

2016. You gave us to understand that in your opinion the law, at present, is rather hard upon private trustees?—Yes, I think it is rather hard. I think that is the general opinion.

2017. The change which you suggested, namely, that he should be liable only as a prudent man managing his own affairs, expresses fairly enough the present state of his liability, does it not, in matters within his trust?—I do not know that it exactly does; I think there is more than that, especially with regard to the loss of trust funds.

2018. But if he is within the trust powers he is not responsible for loss of trust funds, is he?—No; but the point is, what are within his trust powers. He often acts in a very reasonable and *bonâ fide* manner, and often finds himself liable.

2019. Through being wrong in law in the construction of his trust powers?—Yes.

2020. If he is ultimately found right in law in the construction of his trust powers, he is not liable?—No.

2021. Do you suggest that the rule as to liability as a prudent man for managing his own affairs should be extended beyond its present limits, and into the region where a trustee was acting outside his trust powers?—No, I do not think it would be well to encourage trustees to act beyond their powers generally, but I think that in the execution of those powers when it is clear that they have acted *bonâ fide*, they ought to be safe. A great many cases arise where trustees have undoubtedly been acting *bonâ fide*, and are still hit.

2022. Have you considered whether you could formulate such a rule. I think it would be extremely interesting and important if we could get it?—No, I am not in a position to suggest a rule of that sort, beyond its general application; but I have seen that the judges themselves have stated the law in that way against trustees.

2023. No judge has ever yet applied any such rule as you suggest, I think?—No, but they have by repeated decisions enforced liability upon trustees even where they have acted *bonâ fide*; it altogether arises from what is generally called judge made law—it does not so much arise from Acts of Parliament. The Acts of Parliament run in one direction, namely, an endeavour to relieve trustees; that is the tendency of Acts of Parliament. The tendency of judicial decision has been to increase the hardships upon trustees or the liabilities upon trustees.

2024. With reference to the recent Scottish legislation to which you referred, have you any-

Sir *Charles Pearson*—continued.

thing in Ireland, so far as you know, answering to the judicial factor in Scotland?—No, we have not.

2025. You observe that Section 18 of the Act of 1889, to which you referred us, is built upon the existence of a department of the court which has at present judicial factors under its supervision?—We have no official in Ireland corresponding to that—the judicial system in Ireland is very similar, with the exception of land administration—I am talking of administration under the Land Act; but the judicial system, so far as Common Law and Chancery Procedure is concerned, is almost precisely the same as in England. We have an Accountant-General in Ireland, who in England is called the Paymaster General. It is only a difference of terms; it is the same official.

2026. Have you thought out how the change which you suggest, analogous to the Scottish legislation of 1889, could be introduced in England and Ireland on the existing basis?—I am sorry to say that I have not had an opportunity of doing so, for the letter that communicated that suggestion, the letter of Messrs. Gillespie and Paterson, was only dated the 21st of March, and it has arrived too recently; but it occurred to me and to my colleagues that it did contain valuable suggestions that might be brought before the Committee for consideration.

2027. I agree with you; I think the Committee is indebted to you for referring us to that letter?—We have of course the chief clerks in the Court of Chancery, but you have also chief clerks over here, who are officials who might act. We find those chief clerks very efficient in the general execution of Chancery business, and we think that the chief clerks in the Chancery Division might be used for the purposes of that section. Of course we have no analogous official to a judicial factor; but it is very familiar to you, no doubt, that there are in England a number of chief clerks, and we have the same officials in Ireland; and it has occurred to us that the machinery of that section might be entrusted with great advantage to those officials.

2028. You mean that the chief clerks or some of them might be put in the place which is occupied by the department of the court, in the legislation that we are speaking of?—That occurs to us. He is an official familiar with business of that sort.

2029. Is not the Paymaster General a closer analogy?—I think the chief clerk is more familiar with the taking of accounts than the Paymaster General. The Paymaster General's duties largely consist in the supervision and keeping of ledger accounts of funds in court, and so forth; but the actual investigation and checking of accounts with regard to what items ought to be on one side or the other is the duty more of the chief clerk.

2030. He deals more strictly with the matter of audit, properly so-called?—Yes; for instance, all accounts of trustees and executors, in relation to suits which are the subject of a Chancery Administration suit, are audited by the chief clerk in the regular form of accounts.

Dr. *Farquharson.*

2031. Why is it that it appears to be so much easier to get private trustees in Ireland than in England?—I do not know, really.

2032. We have had strong evidence in this room as to the difficulty and the increasing difficulty that there is in England in obtaining suitable persons as trustees?—So I have seen. I do not know why it is, but it is so. I am not speaking merely of my own experience, but I think it is the general experience in Ireland whenever you find family trustees in Ireland. But there is one reason for that. Very often if you ask a man to be a trustee he says, "Well, I shall want a trustee myself in course of time," and I have never found it a matter of any practical difficulty at all.

2033. Was I right in understanding you to say that there are fewer trusts in Ireland than there are here, that they cover a smaller range of operation?—Proportionately I should say that the number was probably the same, but the amounts are very much smaller. The subject-matter of trusts in Ireland, as compared with the subject-matter of trusts in England, is very much smaller, but I should say that, considered numerically, the number of trusts in Ireland were as great as the number of trusts in England. There are very few trusts, of course, in Ireland amongst the working classes, practically none; in fact, I hardly ever meet with a case of that sort. I think some evidence was given before this Committee to the effect that there were some such trusts in England, and I daresay there may be; but that certainly does not obtain in Ireland.

2034. And the loss from fraudulent appropriation of funds appears from your evidence to be very small in Ireland?—My experience is that it is a very rare thing indeed.

2035. Do you think that those cases that come before the public cover all the instances of the kind?—I do not say that they cover all of them; I would not say that, but my experience is that fraudulent breach of trust is a rare thing to happen.

2036. Are there not a great number of cases in which the better policy for the person who has lost money by that kind of fraud is to hush the thing up rather than to make it public?—It may be so, but whether it may be a prudent thing to hush it up or not, so far as my experience goes it does not take place. As a rule it is a very rare thing in Ireland.

2037. Supposing that the trustee is a man with some kind of income from public or other sources, if the fraud is made public he is ruined, and has no future income, whereas if the thing is kept quiet he will at all events be able to go on paying the income of the money, will he not?—That would be true, but I have never met with such a case.

2038. You have personal knowledge of such cases, I imagine?—I am not saying that they do not exist.

2039. Then you think that in Ireland, at all events, there is no demand for a public trustee?—Absolutely none.

2040. Supposing that there was a demand, would that induce you to favour the idea, supposing

Dr. *Farquharson*—continued.

ing the demand was very strong on the part of the public for this kind of protection of the corpus?—I think if there was a public demand for anything it ought to be sooner or later gratified.

2041. Would you waive some of your objections in that case?—Yes; but I think if the public understood the objections there would never be any demand. Any of the gentlemen that I have spoken to who are competent to form an opinion on the subject have come to the same conclusion.

2042. Is that on the ground of expense?—Not altogether; that is partly, but not the main reason. One of the main reasons is the absolute inflexibility of a public trustee. A man feels satisfied if the administration of his affairs is in the hands of people he knows, and, as a rule, he has confidence in the person whom he selects; of course, he would not select them if he had not. A man feels a very strong disinclination to hand over the administration of his property and its custody to a person whom he absolutely knows nothing about; and the fact that every circumstance connected with the dealing with that property and its administration would be in the hands of a stranger operates very much upon people's minds, especially as not only is there that disadvantage, but it is associated with the necessity of a charge upon the trust fund which they do not now pay.

2043. But if the public trustee were to be the mere custodian of money, and to co-operate in all matters of a private and family character with a private trustee, would that meet your objection?—I think it would go a long way. I think it should be considered in a double aspect. If the public trustee is a mere depository of money and only associated with private trustees, then he would be obliged to pay at the discretion and order of the private trustee; and in that case it is very hard to see where the objection to that scheme would be. Then the trust would have Government security, and that Government security would be at the discretion and order of the private trustee. I do not see what possible objection there could be to that, except that some man might say, "I do not like the expense"; but certainly he would have the very great advantage of Government security, and he would have the administration of his trust in the hands of the private trustee, the public trustee being the depository. But then in that case the public trustee would undertake all the responsibility for whatever the private trustee chose to do; he would be at the mercy of his discretion, and there would be the Government security for any error that the private trustee might make. If that was done I do not see how any reasonable man could object to it. On the other hand, if the public trustee had a veto on the discretion or order of the associated trustee, the private trustee would not be an administrator at all, but matters would be practically under the control of the public trustee, because whatever the private trustees did, if the public trustee had a veto they would be mere figure-heads and would have no real voice in the administration.



Dr. *Farquharson*—continued.

2044. The difficulty of expense would be met in this way, of course: that applying to the public trustee would be a purely voluntary process; if a person for the sake of security liked to pay a little more money he could do it; but he would not be obliged to do it?—Yes, if purely voluntary.

Mr. *Greene.*

2045. You have mentioned three cases that you know of, of loss by misapplication, two of them being cases of personality. Were they trusts for large amounts?—No, one of the two was 130*l.* and the other was 700*l.*; in the third case it was between 400*l.* and 500*l.* In two of the cases a considerable portion of the money was paid back, not all. In the case of the 130*l.* there was a complete loss.

2046. I notice that in two of them the trust funds were vested in one trustee; was that by survivorship?—Yes, it was by survivorship.

2047. You appreciate, I daresay, the great danger that there is from the trustee by survivorship being able to control the funds, according to the operation of the law?—Yes, certainly.

2048. I rather understood you to give a suggestion, which I will deal with in a moment, with regard to the cases of a trustee of real estates, but let us deal first with personal estate. Can you offer any practical suggestion for clogging the power which a sole trustee by survivorship has of misappropriating funds which have come into his possession?—It is very difficult to make a suggestion of that sort. There ought to be, I think, a provision that there should always be at least two trustees in a trust; there ought to be an enactment to that effect, I think. It has been suggested by someone that it should be penal to be a surviving trustee, but that, I think, would be very strong.

2049. Do you think it would be practicable to require that immediately a person became by survivorship a sole trustee he should not be able to transfer property so vested in him without an order of the court?—I think that some such check would be very useful, because so far as I am aware, either from experience of my own or from what I have observed in other cases, misapplication of trust money arises, as a rule, from survivorship of one trustee; that is, so far as I know, the main cause of the loss of trust funds apart from mere technical breaches of trust.

2050. Do you think that the members of your learned body would at all object to such a proposal as I am now making?—No; on the contrary, we should be very glad to support such a proposal.

2051. The operation of such a rule would be this: that, upon the death of the last trustee but one the property would vest, by the operation of the law, in the sole survivor?—That is how it is now.

2052. Then could you make it possible that no transfer from him should take place without a summons to a court; or what sort of procedure would you think possible?—The law has made trustees joint tenants for the very purpose of making the survivor give a good discharge. The

Mr. *Greene*—continued.

object of making trustees joint tenants has been for that very purpose, and that the survivor might not be hampered in the execution of his trust.

2053. The suggestion that I am putting to you is only to retard its operation, subject to an order of the court?—In reference to your question whether it might not be desirable to prevent trustees being joint tenants, I would remark that the operation of joint tenancy in law is to give the power of dealing with property to a survivor; and it was for that reason, as I mentioned, that trustees were made joint tenants. It might be a matter for consideration as to whether they should be made tenants in common in all cases.

2054. The proposal that I offered for your consideration was to leave the law as it is, but to postpone its operation, or rather to postpone the power which the trustee has until he has the sanction of the judge. His discharge would be the only discharge requisite, but he could not give it, under the suggestion that I made, without the sanction of the judge?—I think that something of that sort would be very desirable.

2055. You made a suggestion, I think, with reference to land which came very much to that; it was about no receipt being valid in certain cases. I did not quite catch what it was?—No receipt for capital money would be valid. I was reading from a note of a suggestion that I had made.

2056. Might I hear it again?—That you might enact that no receipt for capital money should be valid if signed by a single trustee. The objection of Mr. Warmington to that was, "What is capital money?" But there are many cases where you can identify it.

2057. What was contemplated in that case was the sale of real estate that belonged to the trust?—Yes.

2058. Either by the sole survivor or by more than one trustee?—Yes.

2059. And that the purchaser of the estate would be precluded from getting a proper discharge for his purchase-money?—Yes, unless it was signed by two trustees; it is the rule of the court.

2060. Would not that lead him into inquiry whether he was purchasing trust property?—Yes, but often the trust is disclosed.

2061. But take a case where it is not?—I think there would be a difficulty where it is not disclosed.

2062. Why should not the suggestion that I made to you before, with regard to personalty, namely, of clogging the operation of the common law at present, apply in that case also?—The suggestion about clogging it in the case of personalty was one that we suggested in the previous part that I read to the Committee about the rule under the Judicature Act in Ireland.

2063. You did, as regards Rules 9 and 10; but I am putting it to you now with reference to real estate, why should not what I was talking of just now be applied in a case of real estate, namely, that the last survivor of more than one co-owner as joint tenant should be prevented from giving a discharge unless he gets a judge's order for the

Mr. *Greene*—continued.

sale?—I think he should be prevented. I think it would be very desirable indeed to prevent the surviving trustee dealing with trust funds.

2064. It would be possible, would it not, to very quickly get an order of the judge if proper rules were made, because the sale of real estate takes some little time?—Yes.

2065. And while that is being contemplated he would have only to notify, would he not, to the judge that he was in possession solely of property and wished to transfer it?—Yes.

2066. That would enable a judge to call in the beneficiaries, or make any inquiry that was necessary?—Yes, that might be done.

2067. Or to appoint a fresh trustee?—Yes.

2068. And even the officer of the court might be used for that purpose?—Yes. In dealing with funds in courts, the court never pays money out of court, except to two trustees; and if there should be a surviving trustee, new trustees are appointed. I do not know whether that is the practice in England, but it is in Ireland.

2069. Trustees are appointed for that one purpose?—Yes; and the court does not consider the receipt of one trustee a good discharge. What occurs to us is that the suggestion about the extension of that *distringas* would, to a very considerable extent, operate as a security on the trust fund.

2070. You refer to personalty, of course?—Yes.

2071. Would not that be open to objection from the companies, that it would mix them up with the claims, and possibly the rival claims of persons, and hamper their register with notices of trusts?—They are not allowed to take notices of trusts.

2072. Would not your scheme involve them in that difficulty which they are now free from?—No, I think not; because, notwithstanding the provisions of the Act of Parliament that companies are not entitled to take notices of trust upon the register of their shareholders, Order 46, which has the effect of an Act of Parliament, obliges companies to take notice of a restraint upon the fund. The operation of that order does not oblige the company to investigate a beneficial title, but it merely says: A.B. is the legal owner, is the owner on your books of certain shares; you shall not deal under the transfer of A.B., or allow him to deal with the stock so long as this stop is on against it. It does not oblige the company to go into any investigation as to whether A.B.'s title is good, or whether C.D.'s title is good, but says: You shall not allow the stock to be dealt with at all. I am not alluding to dividends, because in the form of *distringas* given in the Appendix the notice which follows the affidavit on which that *distringas* is founded states that it may apply to either dividends or capital. Manifestly to make it an operative security against the fund in the hands of the company that *distringas* would, if sound in the form of it, apply only to the capital, the dividends continuing to be paid as before.

2073. Does that not involve the company in appearing in litigation afterwards when the person issuing the *distringas* is litigating with other people

Mr. *Greene*—continued.

people as to their right?—No; Rule 9 deals with that: "A notice filed under Rule 4 of this order may at any time be withdrawn by the person," and so on. Taking the first case, a man files notice grounded upon a statutory affidavit of *distringas*, and, from the moment of the service of that, the company is bound not to allow the transfer of stock until it is withdrawn—there is no difficulty about it—on a written request signed by the man who put the *distringas* on.

2074. Supposing that the person who gave it was dead, there might be considerable expense—I speak from personal knowledge—to the company in making these investigations, might there not?—But, after all, that expense is not in any way different from the expense that the company is bound to go to in determining the title to shares as between the holder and his legal personal representative. If a man puts in a written request, putting this stop on, it can be withdrawn by him; and if he dies subsequently to that, his legal personal representative stands in his shoes, of course. But every company is bound to take notice of probate or letters of administration of a deceased person, and it would seem to follow that they would also be bound to operate upon the order of the executor or administrator of a deceased holder of a *distringas*. Then the other way that it could be got rid of is by an order to be obtained by motion on notice duly served by any other person claiming to be interested. The way that that would be done, would be that, if any other person served the notice and obtained the order, he would serve that order on the company. The company would never disappear. The company would be bound by the *distringas* in the first instance, and then by the written order of the person who lodged it, or by the order of the court, obtained on the application of any other person interested.

2075. Does your suggestion apply where the capital may be in the hands of private individuals, not a company; say money left in partnership which is subject to a trust; or how would you deal with the case that I suggest?—"In the following rules of this order, the expression 'company' includes the Governor and Company of the Bank of Ireland, and any other public company, whether incorporated or not; and the expression 'stock' includes shares, securities, and dividends thereon." If the word "person" were to comprise partnership you would then have a partnership by virtue of the glossary of the Act, if so amended.

2076. Private persons in addition to public companies?—Yes.

Mr. *Butcher.*

2077. Are those the Irish Judicature Rules?—Yes, I can give you a copy of them here (*handing in the same*); it is to be found at page 853 of the Annual Practice 1895. That is the English rule.

Mr. *Greene.*

2078. Two modes or two sorts of public protectors have been suggested here; one an official who might be spoken of as a public



Mr. *Greene*—continued.

trustee, and another mode of protecting the public would be by means of utilising the Accountant General or the Paymaster General, or some officer of the court. Have you considered the comparative merits of either of these two systems?—It would depend very much upon who was the Accountant General with regard to everything but the depository of the funds. As a depository of funds, of course, the Accountant General is irreproachable.

2079. Does it occur that the appointment of one public official centralised in London might find it very difficult to work all over a large country like England?—I cannot venture to offer an opinion, of course, about what should take place in England, except from the general view that, owing to the magnitude of the country, it would be an enormous business. I have seen two or three conjectures as to the number of trusts in England, which differ widely; but, however they differ, it is clear that they must be extensive both in number and amount. It seems to me that it would be simply an enormous business.

2080. Do you think that it would be possible for one person really effectually to control all the trusts in England?—It would be absolutely impossible, or in Ireland.

2081. Does it then seem possible to allow the protection or control to devolve on District Registrars or County Courts?—I think that would be an almost impossible system.

2082. Have your County Courts in Ireland equitable jurisdiction?—Yes, to the extent of 500*l.* they can administer trusts.

2083. Would it be possible for the County Court to be a little improved in method, so that it could protect trust funds in a way necessary to protect funds adequately?—I think that the jurisdiction of County Courts as they stand is very efficient. I believe the same provision does not exist in England, but in Ireland the County Court has jurisdiction in administration trusts to the extent of 500*l.*, and that is a very inexpensive process. It is done by what is called an Equity Civil Bill. It comes before the County Court judge, and he makes a reference to his registrar, the account is made up, and a final decree is made which determines the rights of all parties.

2084. Why should not all the protection necessary for trustees and beneficiaries be obtained by employing the jurisdiction of the County Court?—What happens before a County Court judge is simply a Chancery suit on a small scale, and to suggest that there should be a Chancery suit with regard to every trust would, I think, be an unpopular idea.

2085. But the expense might be diminished, surely?—The expense of a Chancery suit?

2086. Yes. All the conditions that avail for the administration of a Chancery suit might be employed to work the trust on some such lines, might they not?—I think the lines suggested might be employed. I think it is an undesirable thing that there should be Chancery suits if it can be avoided in the administration of trusts. Every Chancery suit, no matter how

Mr. *Greene*—continued.

expeditiously or cheaply conducted, necessarily involves, in the first place, a great deal of delay and uncertainty, and secondly, a great deal of expense, which I do not think it would be desirable to apply generally to trusts, which are for the most part satisfactorily carried out. From my own personal knowledge, a very large number of trusts have been carried through in my own experience without any difficulty or trouble whatever, merely as matters of administrative routine, without the trustees being obliged to take the opinion of any court; and some very complicated matters have been brought to a successful conclusion merely as a matter of business.

2087. Why should not the County Court be the depository of funds, then, and in that way act as trustee?—The County Court Judge is only once in every three months, or his registrar; and he sits for a limited time.

Mr. *Kimber*.

2088. I think I understood you to say that you considered the amount of loss of trust funds by defalcation to be very small in proportion to the great bulk of trusts?—Yes infinitesimal as compared with the number and amount involved in trusts.

2089. Then among the safeguards with which you would surround trust funds, would you reckon the more severe penalties and the very prompt jurisdiction which is exercisable by the courts over trustees?—Do you mean for fraudulent misappropriation?

2090. Yes. I will put it in this way: Is not the jurisdiction very prompt, and are not the penalties very severe?—Yes, I believe they are. A criminal breach of trust is of course a criminal offence.

2091. But apart from that, the Court of Chancery, which has the jurisdiction over the administration of trusts can commit a man to prison for not obeying its order, can it not?—Yes.

2092. Notwithstanding that arrest for debt has been abolished?—Yes.

2093. In point of fact, if a trustee owes money to his trust he can, by an order of the court directing him to pay and that being disobeyed, by what is called a Four Day Order, be committed to prison?—Yes.

2094. I am speaking of the court having power, under disobedience of what is called its Four Day Order, to commit a man to prison?—Yes.

2095. Then as regards solicitors there is a very severe discipline attaching to them?—Yes.

2096. Involving the ruin of a man's professional life?—Yes, clearly.

2097. That discipline is exercised in the court in the first instance in Ireland by your Incorporated Law Society?—Yes, to a large extent. What happens is that the complaints come to us from persons aggrieved, we investigate them, and if we think they have any foundation we bring them before the court. If the parties disagree with us it is open to them to go to the court on their own motion.

2098. You consider that that very direct and prompt jurisdiction, and those severe

Mr. *Kimber*—continued.

penalties, are, or ought to be, certainly some safeguards surrounding trust funds?—I think so.

2099. Do you agree with those witnesses who have said that if an official trustee were appointed his duty might be restricted to the custody of the capital?—That would depend entirely upon the other provisions that would be associated along with his trust.

2100. Let me put it the other way. Do you consider that if an official trustee were appointed he should have vested in him the many discretions which, in the present state of things, and, in fact, in any state of things, would necessarily have to be exercised by trustees?—I do not; I think that makes the system unworkable.

2101. May I categorise those discretions in the following manner, and if I do not enumerate them all, perhaps you will mention any others that occur to you. First, there are the powers of leasing and sale and exchange of real estate?—Yes.

2102. Then the fixing of mining royalties in the case of mining properties, and the terms of the mining tax?—That is very rare in Ireland; there are very few mines in Ireland.

2103. You have some very good businesses in Ireland, no doubt, which are sometimes the subject of trusts?—Yes.

2104. Mercantile businesses?—Yes.

2105. Farming businesses?—Yes.

2106. The carrying on of those businesses you would not vest in the official trustee, would you?—No, I would not.

2107. From a public policy point of view you would not consider, perhaps, that it would be right to entrust him with them?—I think it would be simply impossible. I think that would put an end to farming altogether.

2108. The same remark would apply to a manufacturer, perhaps?—Yes, to all businesses and trades.

2109. Then, with regard to the making of settlements on children, discretion is, as you know, sometimes vested by a will in the trustees under that will?—Yes, and the power of advancement for starting sons and daughters in life.

2110. The power of advancement to sons?—Yes.

2111. For setting them up in business?—Yes.

2112. And the selection of businesses for them?—Yes; and the marriage of daughters with the approval of trustees.

2113. Involving sometimes the question of the allowance for the trousseau?—Yes. It is a very common provision in wills and settlements to make, on the marriage of a daughter, her fortune depend upon her marrying at the discretion of the trustees—with the approval, I should say, of the trustees.

2114. Then there are sometimes powers to lend the fund on some of the capital of the fund to beneficiaries?—Yes.

2115. You would not give that discretion to an official trustee, I take it?—I think he never would exercise it.

2116. Then, with regard to the power to change investments, there are many investments that we could

Mr. *Kimber*—continued.

could scarcely allow an official trustee to have put in his name, shares in banks for instance?—I think what the official trustee would do about investments is that he would put all the money in new consols.

2117. With any change of investment would you give him a discretion as to those?—I do not think, whether you gave him discretion or not, he would ever exercise it.

2118. Assuming then that all those discretions, that involve more or less a knowledge of the family circumstances, should not be committed to an official trustee, his duty would be reduced to that of the Paymaster General, that is, the custodian of the funds?—Yes, custodian of the funds, and only then practically operating by an Order of the Court.

2119. Now we come to the duties of the Paymaster General. He never acts, either as regards receipt or payment of money, or goods, without the express order of the Court, does he?—Yes, in one or two cases he does. In cases where money is paid into Court by a defendant he allows the plaintiff to withdraw it without an Order of the Court for lodgment to his satisfaction.

2120. But even that is by virtue of a general order?—Yes.

2121. If the official trustee were made a kind of paymaster general, with duties limited to the receipt or payment or delivery of funds, he would either have to act upon the direction of somebody or at his own discretion?—Yes, I think so.

2122. If he acted entirely at his own discretion you would have to face the evil of vesting him with discretionary powers?—Yes.

2123. If he exercised that discretion he must do so upon some evidence?—It is absolutely necessary that he should do so, I think.

2124. Do you think that an official trustee could be authorised or would be justified in accepting evidence other than that upon which the Court itself considers it safe to act?—He would do so at his own risk, I think. I do not think he would do so, so far as I could form a judgment.

2125. If he acted, on the other hand, not at his own discretion, but under order or direction from somebody, the giving of that order or direction could scarcely be given to anyone of the beneficiaries; the power to give direction or order to him could scarcely be given to one of the beneficiaries?—I am afraid that order would be exercised very much in favour of the beneficiaries if they had the power.

2126. You would have to meet all the difficulties of conflict of interest between one beneficiary and another?—Yes.

2127. And also the difficulty arising from many of the *cestui que* trusts being not *sui juris*?—Certainly.

2128. Is it not the fact in your experience of the profession that most of the cases of defalcation arise where the funds have got into the hands of the surviving trustee, the sole trustee?—I believe that to be the fact.

2129. In the inception of trusts no lawyer, or in extremely rare cases would a lawyer construct a trust, or advise a trust being constructed,



Mr. *Kimber*—continued.

either by a testator or by a settlor, with one trustee?—No; I think, as a rule, that is a very rare thing.

2130. One rule of the Court is, I think, that it will scarcely ever appoint two, and would generally require three trustees in trusts of any importance?—I do not think we have that rule. I am not aware of any such rule, unless there was some special direction in the settlement on that point. The Courts in Ireland always require two trustees before they will pay out money, but I have never known them to insist upon three.

2131. The reason given in England, at all events, is that in the case of the death of one, the funds do get into the possession of a single person?—No doubt.

2132. I may take it generally that the effect of this Order 46 of the general orders of the Court under the Judicature Act, stated in a few simple words is, that it enables anybody having an interest in a fund to put a caveat upon the transfer or disposition of the fund?—Yes, for a limited period.

2133. And it gives that person, in the case of any expected defalcation, opportunity and time to go to the Court to prevent a wrong-doing?—Yes.

2134. And that it achieves without involving the inconvenience of the company having to examine into the nature of the trusts?—Yes.

2135. In point of fact, it puts the trustee and his beneficiary face to face, and puts them in a position to go to the Court in time to prevent the difficulty?—Yes.

2136. Do you not think that that is ample protection against the difficulties arising from a single trustee?—We think it is a very valuable provision if Rule 10 is left out. If you read Rule 9 you will see that if Rule 10 is left out it makes that distringas in its operation perpetual until one of two things is done, until the person who lodges the distringas withdraws it, on the one hand, or until it is removed by Order of the Court, to be obtained on notice, on the other hand.

2137. That is your suggestion?—Yes; we think that would be a valuable suggestion.

Colonel *Howard Vincent.*

2138. Have you come here delegated by the Incorporated Law Society of Ireland?—Yes; I am delegated by the Council.

2139. Have these Bills which have been brought in by the late Government and by Mr. Warmington and myself been formally before the Council?—Yes, they have; I do not think the last Bill has been before them, except the other day.

2140. But the first Bill has been?—Yes.

2141. You have drawn up no memorandum on the matter, have you?—Yes, I have put it in.

2142. I see you entered a protest against the official liquidator's Bill?—Yes.

2143. I see you take the objection there that it is injurious to the interests of the profession?—Yes.

2144. Are the objections which you bring before the Committee founded on professional

Colonel *Howard Vincent*—continued.

interests, or public interest?—The objections to this Bill.

2145. Yes?—It is a very difficult subject, but I think, probably, if it was looked at merely from a professional point of view, this Bill would operate rather in favour of the profession.

Mr. *Kimber.*

2146. Would it create costs in facts?—Yes, I think so.

Colonel *Howard Vincent.*

2147. You quite understand that the proposals which have been made, or are likely to be made hereafter, are entirely voluntary; there would be no compulsion at all?—That, I understand is the provision of the Bill; but there is a general view that the tendency of a voluntary measure of this sort is very likely to become compulsory.

2148. But provided it was kept voluntary your objection would be much weakened, would it?—If it is a purely voluntary Bill it is a question whether anyone will avail himself of it or not. We thought it our duty to bring forward the objections to it, because we think, in the first place, there is no demand for it in Ireland; and we call attention to the defects of the measure, not of the measure in its details, but the defects in the principle on which the measure is founded, because we think they should be thoroughly understood.

2149. You say there is no public demand in Ireland for it. Has it ever been considered in Ireland?—Not that I am aware of. It may have been considered in private conversation from time to time, but I never knew that. I have never seen a single letter or article in the newspapers on the subject. That is not only my own recollection, but I have spoken to others, who say the same.

2150. I see you spoke of the absolute inflexibility of a public trustee?—Yes.

2151. That surely is a great advantage as regards the *Corpus* of the trust fund, is it not?—If the only element in the trust was security.

2152. I was very much astonished to hear your contradiction of the judges who have been witnesses here?—I do not think I took the liberty of contradicting the judges.

2153. You are taking another view (we will put it in that way) from witnesses who have been before the Committee as to the difficulty of finding trustees; you say there is no difficulty whatever?—Practically none in Ireland.

2154. That is a curious thing, is it not?—We are more chivalrous, as I think one of the judges said.

2155. And you have no difficulty either in finding executors?—I think not, as a rule. I do not mean to go the length of saying it is exactly a matter of course to find trustees and executors, but before the trust is created and finally finished there are always trustees to be had.

2156. The difficulty of an Irish trusteeship is rather proverbial, is it not?—The difficulty in Ireland in everything is proverbial.

2157. Is it exaggerated?—I do not know.

2158. A large amount of the trustee business

Colonel *Howard Vincent*—continued.

of Ireland is, I suppose, really transacted in England, is it not?—No.

2159. A large number of English solicitors would be concerned in it, I mean. For instance, I am trustee for one or two Irish properties where the solicitors are entirely in England?—Yes; but I think, as a rule, Irish trusts are carried out in Ireland.

Mr. *Butcher.*

2160. Do you consider the position of a private trustee a pleasant one?—It is an acquired taste, I think, being a trustee.

2161. And it is not given to everyone to acquire it?—No, of course not.

2162. It certainly is not a natural taste?—No.

2163. But between the responsibility and trouble there are evils attaching to the post of being a private trustee?—There are disadvantages attached to every post, of course.

2164. I do not wish to put it too brutally, but there is an entire absence of compensation for these necessary evils, is there not; I mean in the way of pay?—With the exception that it is a very common thing to give the executor a legacy for his trouble.

2165. Would such ever be the case with the trustee of a marriage settlement?—I have never known a trustee of a marriage settlement to be paid.

2166. Then would you not be rather disposed to suspect a certain disinclination at times on the part of people to become trustees?—Yes, I suppose so.

2167. Have you not found a certain disinclination prevalent here and there?—Never to the extent of refusal, except on the ground that they had too many other occupations. I have myself refused to become a trustee on several occasions on that ground alone, that I could not personally attend to the affairs of the trust.

2168. And in the case of busy men, men as a rule the best competent to become trustees, I take it that that would lead in many cases to a refusal?—Yes.

2169. I understand you entertain certain objections to the appointment of a public trustee; but supposing that a settlor or testator wished to put his property under the control of an official trustee, would you prevent him from doing so?—Certainly I should advise him not to do it, so far as I understand it; but if he desired to do it afterwards that would be a matter for him. I should consider it my duty to advise him so, having the opinions that I have.

2170. Would you at any rate leave it to him to exercise an opinion with such advice as he might get?—Yes, every man should have freedom to exercise his own choice.

2171. And it might be desirable to give him that option by legislation if he chose to exercise it?—It is possible.

2172. You agree that there is considerable danger from funds being left in possession of a sole surviving trustee?—I think that that so far as I can ascertain is the main cause (not altogether) of the loss of trust funds.

Mr. *Butcher*—continued.

2173. As to this method of avoiding that danger by means of what is not really a distringas, what is the method adopted to carry that out in Ireland?—The word used was caveat, which is the more appropriate word.

2174. It is a notice under the rules which has taken the place of distringas. At any rate that is the procedure in Ireland?—Yes.

2175. Is that method adopted much in the case of a private trustee?—No.

2176. There is expense necessarily attaching to that, is there not?—It is a very small expense. The affidavit on which that is grounded (there is the form of it in the rules) is about three lines.

2177. But as a matter of fact most beneficiaries have never heard of a distringas, or a process analogous to it, have they?—I should say that the majority of them did not know anything about it.

2178. And as a matter of fact one knows from private experience, I take it, that it is very seldom resorted to?—I think that is so.

2179. Then the suggestion has been made that whenever property is so vested in a sole surviving trustee, he should have no power to deal with it except by an order of the Court; but it is the case, is it not, that trusts are very frequently kept off the title to real property of deliberate purpose?—Yes.

2180. That is in order to prevent the purchaser from the necessity of looking into the trusts and seeing whether they have been carried out?—Yes, very often.

2181. And that practice, conveyancing practice I may take it, of keeping trusts off the title has been found very useful and beneficial?—I do not think it is so much adopted as it used to be.

2182. Still it has been largely adopted, and has been found useful?—Yes.

2183. If such a suggestion as this were adopted, namely, preventing the sole surviving trustee from dealing with the property without coming into Court, that would necessarily bring the trusts on to every title, I take it?—Yes; I do not know that that would be such a disadvantage as it used to be.

2184. But still it would have that result?—It might have that result.

2185. Can you at all suggest what would be the cost to the properties of getting an order of the Court wherever a sole surviving trustee were in possession of the property?—Do you mean the cost of a distringas?

2186. No, I meant the cost of getting an order of the Court, giving a sole surviving trustee the power to deal with it?—He has powers to deal with it now.

2187. But a suggestion was made that he should not have power without an order of the Court, and my question was whether you can at all suggest what would be the cost of such an order of the Court?—It would depend very much upon the number of persons interested.

2188. If there were a number of beneficiaries it would be more expensive, and so on?—Yes, but under the Rules of 1891, which have been passed round, the applications to the Court of Chancery on questions of that sort are very summary and very inexpensive.

Mr. *Butcher*—continued.

2189. They would probably be done by summons in Chambers on notice to the parties?—Yes.

2190. But one knows when there are several parties interested that might cost 10*l.* or 20*l.*, might it not?—That would be outside then I think.

2191. And it could not be done, I take it, in the simplest case under 5*l.* or 6*l.*?—Probably that would be about it.

2192. That would be a serious cost, would it not, to throw on small trust funds whenever one trustee out of two trustees died?—If it was a small Trust Fund such an application might be made to the County Court or Recorder, sitting in Dublin, applying the jurisdiction which the County Courts at present have in Ireland.

2193. At present they have only jurisdiction when the Trust is 500*l.*, is it not?—Yes.

2194. If it were a small trust of 1,000*l.* or 2,000*l.*, bringing in say 30*l.* or 40*l.* a year, it would be rather a serious thing, would it not, to throw upon it the cost of an application to the Court from time to time?—But the cost of appointing a new trustee in the room of one at present is already in existence; it would be substitution for that.

2195. Would your application be to get a new trustee appointed by the Court?—That was not my suggestion; I think it was a suggestion of an honourable Member of the Committee.

2196. As I understand it, this application to the Court would not dispense with the necessity of appointing new trustees; it would only be a preliminary to it?—But it might be amalgamated with it if it were adopted.

2197. That, again, would mean additional cost, would it not?—No, it would not mean additional cost if it were amalgamated. Wherever there is a surviving trustee there ought to be always another appointed in room of the deceased trustee. That cost is at present incurred as a matter of administration of trust funds, and it seems a reasonable thing that it should be incurred; in fact its not being incurred is the cause of loss.

2198. But in addition to that cost this proposal would in all cases make it necessary to have an application to the Court, would it not?—Either to the High Court or to the County Court if that suggestion were carried out.

2199. In answer to Mr. Kimber you said, I think, that you did not regard with favour giving any discretion to the public trustee?—No, I would not.

2200. There are, I think, a good many trusts, are there not, where practically no discretion is required, such as ordinary marriage settlements containing the usual trust for husband and wife and then the children?—I think that those require a good deal of discretion. An ordinary marriage settlement contained clauses for advancement (if it is a properly drawn document) to the sons on going out in life, which is surely a matter of discretion; and it requires a good deal of discretion as to the circumstances attending that advancement, the particular position that the son is going to take and the education received beforehand to fit him for it.

2201. That is practically almost the only discretionary

Mr. *Butcher*—continued.

cretionary trust in an ordinary marriage settlement, is it not?—There is often a very serious trust indeed, and that is, providing for the marriage of a daughter with the approval of the trustee.

2202. But if a settlor were contemplating appointing a public trustee, he would not put it in, would he?—Then that deprives the settlor and the testator of the advantages that he now has.

2203. Do you regard that as a very important trust to repose in trustees whom he may not know 20 years hence?—I give that as an instance; but I think it is a very important thing that the wishes and powers of settlors should not in any way be curtailed, or their execution in any way interfered with. That, I think, is a very important thing.

2204. I may take it, generally speaking, I suppose, that in cases of settlements of personalty other than businesses, I mean, there is much less scope for the exercise of discretion than in settlements of realty; you do not have leases and powers of sale and exchange and mining royalties, and all those things, do you?—There is very great occasion in a settlement of personalty for the exercise of discretion, both with regard to investment and advancement of money to children. I think a very large amount of discretion is required in the administration of a trust of personalty.

Mr. *Kimber.*

2205. May I interpolate a question: The powers of advancement and maintenance are now implied by law in every trust, are they not?—Certainly.

Mr. *Warmington.*

2206. Unless negatived?—Yes.

Mr. *Kimber.*

2207. By the express terms of the trust?—Yes, and the accumulation of income for minors, and so on.

Mr. *Kimber*—continued.

2208. As it is an invariable want of society whenever their funds are put in settlement at all?—Yes.

Mr. *Butcher.*

2209. I think I am right in saying that the power of advancement is not implied by law, is it?—I think it is, but, at all events, it is immaterial. It is almost invariable in every settlement to have it introduced.

Mr. *Warmington.*

2210. You said something to one of the honourable and learned Members of the Committee as to the inflexibility of trusts being an objectionable feature in regard to the public trustee; but is it not your experience that when you are instructed to prepare a settlement the settlor generally wants the settlement made as strict as possible?—Yes.

2211. With regard to your amendment of the law as to joint ownership, you would agree, of course, that we cannot distinguish between those cases in which persons entitled in joint ownership are trustees, and those in which are not?—Yes, I think there would be a difficulty about that.

2212. Then, I suppose you would suggest some such amendment of the law, such as this: that no property vested in two or more persons shall by survivorship vest in a single person, so as to enable him to dispose of or deal with the same except in compliance with an order of the Court?—Yes, it would come to that; but I think that is a suggestion which would require a good deal of consideration; it has only been mooted here. A suggestion of that sort, if practicable, would be a very valuable provision.

2213. It would be very far-reaching?—Very far-reaching indeed, but still I think it requires consideration.

Mr. David Maxton Lewis called in; and Examined.

Sir *Charles Pearson.*

2214. I think you are Secretary of the Public Trustee, Limited?—Yes.

2215. The Public Trustee, Limited, is a company which has offices in Edinburgh?—Yes.

2216. And is registered under the Companies Act?—Yes.

2217. It was formed, I believe, in the year 1886?—Yes.

2218. Was it the opinion of its founders that the difficulties in the present system of private trusts rendered the success of such a company probable?—Yes, that is so. The difficulties incidental to the present system became specially obvious after the decisions in the City of Glasgow Bank leases.

2219. The City of Glasgow Bank failed in the year 1878?—Yes. These cases, which ended about 1882 or 3, drew public attention to the dangers and disadvantages of the present system; and the opinion came to be widely held that some remedy was necessary to relieve private trustees from the hardships of their

Sir *Charles Pearson*—continued.

position. The result has been often the utmost difficulty in getting trustees.

2220. Accentuated the feeling as to the hardship of the position of a private trustee?—Yes.

2221. You are here as secretary of that company by the request of the directors, in lieu of the chairman?—Yes. I ought to have explained that Mr. Ferguson, of Kenmundy, the chairman, was unable to be present, and asked me to take his place.

2222. Will you put the Committee in possession of the difficulties or anomalies in the position of private trustees which led to the formation of your company?—Before I answer that question I may say, as a preliminary observation, that I have been directly connected with trusts for 25 years, and have had a very extensive experience both as a trustee myself and with regard to advising others as to the management of trusts.

2223. In what capacity have you advised others?—I was for 15 years in the office of the secretary

Sir *Charles Pearson*—continued.

secretary and solicitor of the Edinburgh Merchant Company, which has under its management trust funds to the amount of about 900,000*l.* While there, I had also direct personal experience of constituting and administering very many private trusts. Since I became, in 1886, secretary to the Public Trustee, Limited, I have been constantly in correspondence and had interviews with people who felt the difficulties that arise out of the present system. The first of those difficulties, it seems to me, is that very few people have a circle of friends which affords a choice of competent and willing trustees. Many have but few friends, competent or incompetent, that they can ask to act; and in a large number of cases, especially in the case of the poorer classes, they are often actually debarred from creating a very necessary trust by the difficulty of getting trustees. Then I find in practice that, as a rule, trustees are selected on the ground of personal friendship.

2224. Are you speaking chiefly of testamentary trustees?—I should have qualified my observations by saying that it is my purpose chiefly, with your permission, to speak of testamentary trusts. In a great many cases, the testator is influenced in his selection by the fact of friendship, and it humbly seems to me that, in practice, the very quality of friendship is one that often leads to great difficulties and disadvantages,—such qualities, for instance, as amiability, good nature, and the like, which might influence the selection of a trustee by a testator, are the very qualities that very often militate against his ability to act in a judicious manner as trustee. A great many private trustees are willing to stretch a point with regard to investments, in order that the young family may be suitably educated; and very often I have found that in cases of technical breaches of trust, which, to trustees who have not got legal knowledge, seem matters of form more than any other thing, the trustee justifies his action in his own mind by saying that his old friend would approve if he could; and the result in practice is very often disastrous not only to the trustee, but to the trust estate. For instance, one of the daughters may marry. She dies. Her husband is an entire stranger. He insists on his legal rights, takes action, and the result is difficulties, it may be ruin, both to the trustee and to the trust. The cases, however, which come to the knowledge of the public through the law reports are only an infinitesimal proportion of the cases of hardship and worry suffered in private. Then another point that I would desire to bring before you is the fact that under the present system, even supposing that a testator has secured the consent of competent trustees to act, he has no means of ensuring the *personnel* of his trustees after his death. Those that he appoints may die a comparatively short time after him; they may resign; they may refuse to act; and at the present moment there is absolutely no means by which a testator can secure that 24 hours after his death the trustees he has appointed under his settlement will act on his behalf.

2225. Have you any other criticisms to make upon the present state of the law?—I would



Sir *Charles Pearson*—continued.

desire to draw your attention to this: that even supposing the case where a testator has succeeded in getting the consent of suitable trustees to act, and they survive, a very curious anomaly arises under the present system. As a matter of fact, the great proportion of trusts (I speak of Scotland and of trust work there) is performed by solicitors. From ignorance by the trustee of his duties, from his incapacity to perform them, from his disinclination to undertake gratuitous work, or being a busy man, from want of time, the majority of trustees leave the practical management of the trusts to their professional adviser, and actually delegate to him to a large extent the duties of their office. I think it says a great deal for the profession in Scotland that that power which has been placed in their hands has not been more abused; because the power of solicitors, especially where the trustees and beneficiaries are not business individuals, and in long trusts, where the original trustees have long ceased to act, is very considerable. This delegation of work and duty brings about, in my opinion, one of the great anomalies of the present system; that is, that while the letter of the law, that trustees should act gratuitously, is observed, the trust has, nevertheless, actually to bear the expenses of its management. The law just now, it seems to me, fails to secure to beneficiaries either the benefit of gratuitous service, or the advantages of the personal element in the management of the trust in respect of which most trustees are appointed. The trust is managed by a paid agent, who is not directly responsible to the beneficiaries; while the fact that the trustees act gratuitously, places upon them a lower standard of responsibility than the law provides in the case of paid agents; and thus, though the trust work is paid for, the beneficiaries have not the security of that responsibility which the payment of trustees would afford. I do not think there is any other thing under this head of your question that I need dwell upon.

2226. The gentlemen for whom you speak have directed their attention to possible changes of system, I think, in the administration of trusts?—Yes, that is so. They have been influenced mainly, I may observe, by the success of the system that I desire to bring before you to-day, in the colonies and elsewhere abroad.

2227. Then there are several alternative schemes which are possible by way of remedying the difficulties you have pointed out; will you give us your view upon them?—With reference to any remedy, I think, with all deference, that the first point to be insisted upon is, that whatever remedy or whatever change may be considered advisable should, along with the present system, be entirely optional. I do not think that you can give a testator too large a choice, under proper safeguards of course, of the machinery he would desire to bring into operation in connection with the management of his own individual trust. The circumstances of trustees and beneficiaries vary, as you know, very much. A.'s trust might be most advantageously managed by A.'s sons, say; B.'s by a Government trustee, and C.'s by a trustee company; and I think it is of the utmost

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utmost importance that no legal impediment should exist in the way of a testator selecting the machinery for the administration of his trust best suited for his purpose. And the second point which I consider of importance, especially in view of the terms of your inquiry, is that any remedy should be considered not only from the point of view of relief to the trustees, but also that of safety to the estate and the welfare of the beneficiaries. In my view, the mere limitation of the liability of trustees allows a corresponding extension of the dangers to the beneficiaries; and if the present system is to be retained as the only one recognised by law, it is difficult to see how the position of trustees can be substantially bettered without imperilling the interests of the beneficiaries. Briefly, the remedies which have been suggested are, first, a State supervision of trusts in the shape of a compulsory and periodical audit of the accounts of all trustees by the officials of a Government Department. That plan has been tried on the Continent, in France, I believe, and elsewhere; and, indeed, it is not unknown here, because in Scotland we have large trusts, such as Heriot's Trust, and trusts under the management of the Edinburgh Merchant Company, the accounts of which are annually audited by a Government official.

2228. What official is that?—I cannot tell you his name.

2229. Under what Government Department?—The Board of Trade, I think.

2230. Appointed by the Board of Trade?—I think so; or it may be the Scottish Education Department, more likely. The great defect of that system, it seems to me, in its application to private trusteeships, is its inevitable want of elasticity and power of accommodation. It would be, I think, practically impossible for a Government auditor, acting on strict accountant's lines, and in obedience to set rules, to adapt his audit to the great variety of trusts that exist; and the requirements of such an audit would necessarily give rise to a great deal of friction. Now, in private trusts, questions would constantly arise where trustees must exercise a certain amount of discretion, while a Government official, acting in accordance with set rules, would not be able to give effect to payments which the trustees might, judiciously enough, have made. The next remedy which has been brought more prominently before you, I understand, than anything else is the institution of a Government trustee.

2231. That is the next proposal which you make?—Yes, the next scheme. In many respects, the power to appoint such a trustee would, in my opinion, be of the utmost value; but if it is to be the *only* alternative to the present scheme I am afraid it would only be a qualified success. There are several objections, which doubtless you know more about than I do, red tapeism, costliness, and delay; and my reason for saying that I think those objections would, or might be, fatal to anything like general adoption, is the fact that in Scotland trustees had, I think under the 166th section of the Bankruptcy Act, certain powers to go to the Court. That section was repealed by the Judicial Factors Act, 1889, which provides that, "* * * It shall be competent for such trustees or other persons to

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apply to the Court of Session for an order on the accountant" (that is, the accountant of the Court) "to superintend their administration of the estate, in so far as it relates to the investment of the estate and the distribution thereof among the creditors of the deceased and the beneficiaries under the settlement, and the Court may grant such order accordingly; and if such order be granted the accountant shall annually examine and audit the accounts of such trustees or other persons, and at any time, if he thinks fit, he may report to the Court upon any question that may arise in the administration of the estate with regard to any of the aforesaid matters, and obtain the directions of the Court thereupon." That provides a somewhat analogous remedy in Scotland to the Government trustee; only in some of its aspects. As a matter of fact, however, in my experience, and in the experience of all whom I have come in contact with, it is a remedy which is very seldom adopted; the general public do not seem to be inclined to avail themselves of the management of the estate under an order of the Court, unless circumstances have come to such a pass that they are practically at a dead-lock. With regard to the Court of Chancery in England, I do not think I need say anything about that; the mere mention of it is very often quite enough for some people. Another remedy which has been suggested, which obtains in America and elsewhere, is the universal payment of individual trustees. That that might secure better men is possible; that it would provide a higher scale of responsibility is certain. At present, in Scotland, many *inter vivos* trusts, trusts, for instance, for the realisation of bankrupt estates, are managed almost invariably by paid trustees; and I think it is admitted that the work is exceedingly well done, with corresponding beneficial results to those interested. Here the principle of the paid administration of a trust is acknowledged by the law; and the success of the system is mainly due to the fact that the office of trustee is generally filled by men who make it their business to undertake such work. The system of universal payment of trustees would, however, in the case of testamentary trusts, leave untouched several of the evils of the present system which the system I advocate would meet, as I shall presently show. The remaining remedy to which I desire to call your special attention is the administration of trusts by a paid corporate trustee, whose sole business it is to undertake trust work. I think that the removal of all legal impediments to the voluntary employment of a paid corporate trustee would (to quote the terms of your appointment) be the best legislative provision "for securing adequate administration of trusts without the necessity of subjecting private trustees and executors to the risks which they now run." I think that on consideration this remedy will not, in your opinion, involve a revolution. In Scotland, at all events, it is no new thing for a corporate body to act as a trustee, and confirmation is granted to it, or probate would, I understand, be given in England to one of its officials. Then payment for work is not a new feature; the only new feature is, to whom payment should be made. Nor is the adoption of the system an experiment. It has been worked, and is worked with conspicuous success, in Africa,

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in Africa, Australia, the United States, and elsewhere abroad, and has been found to be a public benefit; and I think it is worthy of note that trustee companies have received the sanction of Her Majesty's Government in the colonies. I would desire to ask your attention to a distinction which is not commonly drawn, and that is, between what are called "trust companies" and "trustee companies." Investment and financial companies of many kinds are known as trust companies, and are referred to on the London Stock Exchange and elsewhere as "trust companies," and many of them propose to combine with a very miscellaneous financial business the duties of trustee and executor. Experience in the Colonies and elsewhere emphasises, I think, the opinion that if a company is to act in a fiduciary character, it ought not to undertake any business of a speculative nature; but that the scope of its operations should be strictly confined to purely trustee and agency work, by a rigorous limitation of its objects in its Memorandum of Association. That point, I may mention, was very prominently raised during the consideration of the Trust Companies Bill in the House of Lords.

Mr. *Warmington.*

2232. Lord Hobhouse's Bill, you mean?—Yes. The result there was that Clause 2 of that Bill was amended so as to prevent companies undertaking anything else but trustee work. Lord Herschell made a few observations on that point, which possibly I need not go into.

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2233. Will you just state, as shortly as you can, the objections which have been advanced against the employment of a paid incorporated trustee?—With reference to these objections I would desire to make this observation, that I think in practice they may safely be left to the consideration of the testator. The first objection is that the office of trustee is of so personal a nature that a company could not satisfactorily perform its duties; in other words, that in what may be called the trustee's domestic relations a company would be of no use; for instance, the decision as to what school a boy should go to, or matters of that kind. Now, it is quite true that in many matters, pertaining however, I think, more strictly to the duties of a guardian than trustee, a testator may naturally desire to secure the services and the advice of his personal friends; and whenever the circumstances of a trust are such as to call for that, the matter, I think, can be quite easily arranged without the risks incidental to the present mode of appointment. For instance, supposing the insertion of a clause like this in a will: "And I do hereby provide and declare that in all matters devolving upon my trustees necessitating the exercise of discretionary powers relative to the education and upbringing and outfit in life of my children, or the making of advances to them, or to any of the beneficiaries under this trust, no resolution of any trustees in regard thereto shall be operative unless and until the same shall be approved of by my said wife, whom I hereby request my trustees to consult in such matter." I offer that clause as an illustration of how a testator could combine



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with the appointment of a trustee company the services of a relative or personal friend for purely discretionary matters. And then another point which arises (and with reference to this I must speak with caution), is the question as to whether a corporate trustee must act alone or whether he can be associated with individuals; I shall give you my own personal opinion, which differs slightly from the opinion of our chairman; and upon this subject there have been considerable differences of opinion expressed. My own opinion is, that so far as intromitting with the trust funds is concerned, a trustee company, if it is to be responsible therefor, and to give the guarantee of its capital, must act alone. Divided authority is not, in my view, compatible with undivided responsibility. I think, however, that it might be very easily arranged that while the trustee, the paid corporate trustee, should act alone in all financial matters, a consultative body might act in concert with it very much upon the same lines as the Commissioners in Bankruptcy in Scotland act along with the trustee under the Bankruptcy Acts.

2234. You mean a consulting body appointed in reference to each individual trust?—Yes, that might be done. The other course, such as that indicated by the clause I suggested, would, I think, be more advisable; but trusts vary very much, and there might be some trusts in the management of which the co-operation of a specially appointed consultative body would be of advantage. And with reference to the question of the personal element, which, no doubt, bulks very largely in the appointment and selection of trustees, there is another branch of the law where it is even stronger, and that is in the matter of partnership. I am speaking entirely about Scotch law. With the introduction of the Companies Acts, a new system of managing partnership businesses has been introduced. A joint-stock company, although in many aspects a partnership association, has entirely eliminated the personal element, and transferred the management of its affairs to a board of directors. This mode of management has been found in practice to work in a satisfactory manner, and I think that the interests of those beneficially concerned have been, with a marked degree of success, secured. That is an instance in point, because, under the old partnership system, the doctrine of *delectus personæ* was considered to be essential to success. I think you may get a fair example in the case of insurance companies. A person while in life entrusts to those companies the moneys that are necessary to secure provision for his family after his death. During his lifetime those moneys are managed by a board of directors who, by care and skill in management, build up a reputation which justifies the man in effecting his insurance with them. In many cases the proceeds of the insurance policy are practically the only estate left by the deceased for administration, and my argument from that is this: that if during a man's lifetime he is content to leave his money to be invested and taken charge of by a board of directors, surely there is no reason to deny him the option of a similar mode of management after his death.

Sir *Charles Pearson*—continued.

2235. Then what do you say as to the cost?—As to cost, at first sight it might seem that to pay trustees who had hitherto acted gratuitously, would be to involve the trust in considerable expense; but I will ask you to bear in mind that the employment of a paid trustee does not entail a second payment, but only a change in the person to whom the payment, necessarily in all cases, has to be made. The delegation of the duties of trustees to solicitors in Scotland in practice means that the solicitor is paid for the management of the trust estate; the cost of that comes out of the trust fund. It is not proposed that the solicitor should in any way cease to do all the ordinary necessary legal work, but he would not be entitled to charge for administrative work, because he does not do it. The sum at present paid to the solicitor for doing the work of trustees and as commission on his cash intromissions would be available for the remuneration of the paid trustee; and I believe that a trustee company doing anything like a large business could so arrange its charges that no extra burden would fall upon the trust estate. In many cases, the mere fact that the trustee company is a corporate body, and has perpetual succession, would minimise the expenses very considerably. We all know that in connection with trusts where trustees die, or resign, the expense of making up a title to new trustees is very considerable.

2236. Are there any other objections which you think your proposal would overcome?—With reference to the objections of the profession, which have been advanced very frequently, I may say that in general, in common with the public, solicitors seem to have a very vague idea of how a trust would be administered by a trustee company. I have often had occasion to explain the matter to them, and I have never so explained it without securing their approval. When the system was first introduced into Australia there was considerable opposition by the profession there, which has since been entirely withdrawn. A number of persons seem to think that a trustee company is a huge legal co-operative store. I might go on to say that, in my opinion, it would be to the direct interest of a corporate trustee to secure the services of the testator's solicitor, because his acquaintance with the estate would always be a valuable source of information, and unless there was any proper reason why he should not be employed, I think it would be to the interest of trustee companies always to employ him. Under the present system, trustees delegate their duties, in connection with keeping trust securities, and cash, and so on, to solicitors; but with a paid agent, such as a trustee company; no such delegation would take place. The trustee company would keep all the cash and securities, and would alone intromit with the trust funds. I think, on the whole, it is very doubtful if the employment of a trustee company would lessen the remuneration of solicitors; but even if it did, that is surely no valid reason for delaying a change which, in my opinion, the entire community would benefit from. One advantage that the solicitors, I think, would not be slow to appreciate would be that in the

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case of a trustee company they would be taking counsel with, and instructions from, a thoroughly skilled body, a body that made it their business to act as trustees, and the same business could be done in less time, and the responsibility of the solicitor for any decision would, I think, be greatly diminished. An objection which has been taken with regard to the guarantee of the company's capital not being sufficient, I do not think I need dwell much on. I would say that any guarantee is better than none at all, and you have none at all just now; and I think, on the whole, if you take the analogy of banks and insurance companies, that the guarantees which have been proposed by the Trust Companies Act would be ample.

2237. Then on that point, may I ask, is the capital of your company fully paid up?—No, it is not.

2238. How many shares have you issued?—Four thousand six hundred and five shares.

Mr. *Greene.*

2239. £5 shares?—Yes.

Sir *Charles Pearson.*

2240. How much is paid up on them?—£1.

2241. That, of course, gives a large reserve of liability?—Yes. I should like to say that I do not appear here to advocate the interests of this company, but to bring the system before you, which I ask you to consider on its own merits.

2242. As to the objections which are obviated by the institution of such a company, or the advantages which you claim for such a company as contrasted with the present system, in the first place it is available to everyone?—That is so.

2243. Poor as well as rich?—Yes; and it is no matter of favour to get its services, it is simply a matter of payment.

2244. Does your company exercise any option in the selection of trusts that it will undertake?—No, that has not been so.

2245. You have taken all that have been offered?—Yes; except in one case, involving about, if my memory serves me, 33,000*l.* There our employment was made conditional on our agreeing to hold certain securities which were distinctly outside the investing clause of the deed of settlement; and which, moreover, were to a large extent of a most unsatisfactory nature in every way. In this case, these unsatisfactory securities had been acquired by the trustees at the request of the liferenter; and, I have no hesitation in saying, directly antagonistic to the interests of the children of the beneficiaries.

2246. Is that in consequence of the constitution of your company; do you make a public offer to all which anyone is entitled to accept?—As a matter of fact, the company holds itself out to act as trustee under all circumstances. It is quite a possible thing that there might be such an absolutely unworkable trust that we could not take it up; but we have never found that difficulty exist; and we are hardly likely to decline to act, for we are established for that purpose and it is our business to do it

2247. With regard to the scope of your business, the scope of your business includes acting

Sir *Charles Pearson*—continued.

ing as trustee, executor, administrator, and attorney under a power of attorney, as factor or manager, as liquidator, and also, I think, under marriage trusts and benevolent trusts?—That is so.

2248. How does your company proceed in the formal steps of obtaining appointments as executors?—In England, do you mean?

2249. Yes?—In the event of the appointment by a testator of the Public Trustee, Limited, to be his executor, confirmation probate, as you call it in England, would be granted in favour of one of the principal officials of the company, myself or the managing director, or the chairman, as the case might be, who would be entitled to make the oath.

2250. And is that the recognised effect of such an appointment as you figure upon page 10 of the pamphlet that I have in my hand in relation to your company: "I hereby appoint the Public Trustee, Limited, to be the executor of this, my will"?—Yes.

2251. The effect would be that the company would detach one of its officers to fulfil the office?—Yes.

2252. Has that person so detached a title to go to the court and demand the appointment?—Yes. Probate was in England some time ago granted to one of my directors as the nominee of the Public Trustee, Limited. In Scotland it is different. There confirmation is granted directly in favour of the company. Confirmation was so granted the other day.

2253. And that was accepted as fulfilling the nomination of the testator?—That is so.

2254. What would happen in the event, which I hope will be long deferred, of your death?—I am not here to give skilled legal evidence, especially with reference to English law; and I cannot say what would happen in the case of the death of an official to whom probate had been granted in England: but as I understand the law of Scotland, if any corporate body is appointed as trustee and executor, in its corporate capacity it can take out confirmation in its own favour; and being a corporate body it never dies.

2255. Will you now give us some of the other advantages which, in your opinion, flow from the constitution of such a company?—There is the advantage which you just alluded to, namely, that it is always available, it never fails; it is superior to incidents of death, incapacity, or absence; if a testator appoints the company to be his trustee, he knows it will continue to act as his trustee. It has also by virtue of its being a corporate body, perpetual succession; and on that head alone a very considerable saving of expense will be secured in the cost of completing titles and so on. Then it administers the trust absolutely without fear or favour or any bias. A very important point in my view is that it makes a business of the performance of trust work, and it will act with specially trained knowledge and skill and ability. It has no other business to occupy its attention or to limit its usefulness, or to impair its responsibility. It also provides a directly responsible trustee from whom beneficiaries will be entitled to insist on the highest standard of careful and economical responsible management.



Sir *Charles Pearson*—continued.

It provides security for the integrity of the trust estate, and it retains and is responsible for the custody of all the trust securities, documents, and cash. Faults or crimes of its officials affect the company's funds and not the trust funds. If I were to embezzle a lot of money I should embezzle the company's money and not money belonging to trusts. It is paid by results and its very existence, or the existence of a similar company, would depend on its honest and skilful performance of its work. It does not entail extra expense and its employment is optional. The principle that paid service is the best has been acted upon in all departments of business, and I think there should be no limitation to a testator employing the machinery that he may think best suited for the purpose of securing the adequate administration of his estate.

2256. Is there anything else you would wish to add?—I could shortly, if the Committee have time, but possibly it is not necessary to give a *resumè* of the legislation that has been attempted in this direction.

2257. I think the Committee are sufficiently informed of that?—Doubtless you are. I might however allude to the fact that the Public Trustee, Limited, made an application for a private Act some time ago.

Mr. *Greene.*

2258. They did not get it, did they?—It was withdrawn at the second reading, in consequence of Lord Morley advancing on behalf of the Lord Chancellor the proposition, with which the directors were quite agreed, that it was more a matter for public legislation than for private. Then I should just like, in conclusion, respectfully to submit that the most generally satisfactory legislative provision for securing the adequate administration of trusts would be the passing of a public Act of Parliament for the United Kingdom, extending to responsible corporate bodies especially limited by their constitution to the undertaking of trust work and work necessarily incidental thereto, power to act as trustees, executors, administrators, factors, &c., in the same manner and with the same powers as are now allowed to individuals, and authorising such corporate bodies to make reasonable charges, under such supervision as might be thought sufficient to protect the interests of beneficiaries, giving power to the courts in their discretion to appoint such bodies to act in the management of estates under their control. I believe that the system involved in the existence and working of companies such as the Public Trustee, Limited, is one eminently calculated to relieve gratuitous trustees from the necessity of continuing to occupy their present anomalous position, and that in the removal of all legal impediments to the voluntary employment of paid, skilled, responsible, and always available service is to be found the most effective and practical remedy for the dangers and disadvantages of the present system of trust management.

Mr. *Warmington.*

2259. Your company you said started in 1886?—Yes.

2260. And from that time until now it has carried on its business?—That is so.

Mr. *Warmington*—continued.

2261. Can you make a distinction with regard to the volume of business between what I call public and private trusts?—Your distinction being what?

2262. Charitable trusts and trusts for companies?—We have not undertaken any charitable trusts.

2263. Have you undertaken any trusts for public companies like debenture trustees?—We have not.

2264. Then what is the volume of private trustee business that has been accepted by the company?—Comparatively small, in my view for two reasons against (1) Legislative powers are required to enable trustees under existing trusts to assume the company in their place. The business at present is necessarily a waiting one; and, of course, I cannot say in how many cases those still in life have appointed the company under their wills. (2) The company is comparatively unknown. This might have been remedied by advertising; but my directors have hitherto hesitated to push the business of the company by such expensive means, in the hope that, ere long, the scope of the operations of trustee companies will be so extended by legislation as to make advertising remunerative. When the company was started in 1886 the directors took powers in their memorandum of association to apply to Parliament for an Act to remove the present legal impediments, which exist to the employment of such a company, and they have endeavoured to influence legislation for years in that direction; but hitherto they have not had opportunities of doing so successfully, and they have, if I may use the expression, "held their hands" in the way of bringing the company forward until they should be in a position to do all sorts of trust work by the removal of the legal impediments which at present exist.

2265. Do you mean that at present no very large success has attended the operations of the company?—That is so, because the amount of success is practically limited to the single case of a testator directly appointing a trustee company; and few persons know that such a thing exists, or the advantages that would follow its appointment. From the great number of cases—such as going trusts, intestacy, management of the estates of insane persons, infants, &c., a trustee company may at present be said to be shut out.

2266. And you look to future legislation to remove the impediments which have operated against the attainment of that success?—Yes.

2267. Without going into the private matters of the company, have you any objection to state what is the total amount of the estates which are being administered by the company?—We have just completed the winding-up of certain trusts, involving roughly about 30,000*l.*, but just at the present moment I should think, roughly speaking, between 4,000*l.* and 5,000*l.*

2268. You mean as a gross sum; the capital sum?—The capital sum.

2269. Would that be divided into a considerable number of trusts?—Four trusts.

2270. That is the present position of the company; four trusts, with about 4,000*l.* capital

Mr. *Warmington*—continued.

affected by those trusts?—It is very difficult to say. For instance, there is heritable property in one trust which might sell for 1,000*l.* or 1,500*l.* We had one trust where the testator valued his heritable property at 33,000*l.*, and it was ultimately sold for 9,000*l.*

2271. Are facilities offered by the company for the deposit of wills which appoint the Public Trustee, Limited, as the executor?—Yes, that is so.

2272. Has any great use been made of those facilities?—No. We are aware that the company have been appointed under wills which will not become operative until the testator's death, but we have had no deposit of such wills. The practice in Scotland is that the solicitors who prepare the wills undertake the safe custody of them for their clients, and retain them in their own possession.

2273. And as regards the trusts which you now administer, are many of those testamentary trusts?—Yes; I may say not entirely testamentary trusts, but the majority are testamentary trusts.

2274. Do you publish accounts to the public?—No, we do not; but I would suggest that that would be quite a reasonable regulation to introduce into a public Act, in the same way as insurance companies and others have to publish accounts.

2275. Assuming that something is wanted beyond a private trustee, is it not your experience of the present company that that want has not been quite satisfied by your own company?—If you will allow me to put it in this way, I prefer to say that if we are allowed to judge by the experience of similar companies carrying on business where legal facilities exist for the transaction of their business, trustee companies would be a marked success and satisfy most wants.

2276. Are you referring to the colonies?—I am.

2277. Are you aware that in most of those colonies there is a Government official who is a public trustee?—In New Zealand there is a public trustee; in India you have administrators.

2278. Do you think that your company would be worse off or better off if it were to do its business in competition with a public trustee?—I do not think that a trustee company need fear the competition of any Government official whatever. I have not, personally, the faintest objection to the utmost facilities of selection being given to a testator in the way of how he is to have his trust administered.

2279. But I understand you to say that you think something in the nature of a public trustee, either a company or an official, is desirable?—I do. In my use of the expression "Public Trustee," I hope I have not misled you. When I speak of "The Public Trustee," I allude to the company of that name. There are two things, a trustee company and a Government official; under certain situations of testators one might be better in one case, and the other in another.

2280. Are you a member of the legal profession?—I am not

2281. You

Mr. *Warmington*—continued.

2281. You are aware—I believe I am right—that in Scotland there is, or there was, nothing like what we call a Chancery suit in England?—No, but we have got multiple poindings, which, in some respects, closely resemble it.

2282. But this Act of Parliament to which you refer was rather to give the benefit to Scotland, was it not, of the practice that obtained in England, of an administration suit?—I do not quite follow you.

2283. I refer to the Judical Factors Act; was not that so?—The provision of the Judicial Factors Act, to which I referred, is to enable a body of trustees who have difficulties in the way of managing a trust to go to the court. The court arranges for the trust being managed under its directions by the Accountant of Court who annually audits the accounts.

2284. That was thought to be a great benefit conferred upon Scotland, but it has not been received with any great enthusiasm, has it?—I am not prepared to give an opinion as to whether it was thought to be a great benefit. It is a provision which, under certain circumstances, would undoubtedly be a benefit.

2285. But it has not been much availed of I understand?—It has not been at all extensively availed of. By virtue of the provisions of the Judicial Factors (Scotland) Act, very many estates belonging to infants and insane persons are administered under the supervision of the Accountant of Court; but very very few testamentary trust estates are.

2286. Again, perhaps you can tell us this: In Scotland it is not necessary, is it, that all the trustees should concur, but a majority may come to a conclusion as to administration?—That is so; and in the same way very much the same rules of law apply to partnerships. But you will please understand that I am not here to give legal evidence.

2287. Supposing there is an equal division amongst the trustees; say there are four trustees, two holding one way and two another, how is the matter settled; is it upon application to the court?—I am not in a position to give you evidence upon that point. The solicitors of the company have gone into all those legal points, and I have no doubt they would be very glad to give you any information that might be required; but, personally, I am not in a position to enter into legal and technical details of that kind.

2288. As a matter of fact has your company acted conjointly with a private trustee?—It has not. I may explain that in the case of three trusts recently wound up under the management of the Public Trustee, Limited, the income accruing from certain portions of the funds had to be devoted to the maintenance and education of a minor. This was, for years, done in a manner satisfactory to all concerned, by my directors taking counsel with relatives. These relatives, however, were not in any sense joint trustees with the company.

Mr. *Kimber*.

2289. What are the legal impediments which you say have hitherto obstructed the progress of your company, and which you suggest should be

Mr. *Kimber*—continued.

altered by Act of Parliament?—The two main principles, as I take it, which are recognised by the law are that a trustee must act gratuitously; and, secondly, that he must be an individual I think.

2290. Where have you derived those suppositions from; your legal advisers have not advised you to that effect, have they?—From the result of the operations of the law it has been apparent to me.

2291. You are not aware, then, that at the present time it is perfectly legal for anybody to appoint a company as trustee?—I have said in Scotland a corporation can be so appointed, but not in England.

2292. As trustee?—Yes.

2293. And whether he appoints a corporation or a person he can pay him if he likes, can he not?—A testator can authorise a trustee to be paid by his will.

2294. So can a settlor in the case of his settlement?—Yes.

2295. Then those are not impediments that it would require an Act of Parliament to remove?—Not in the case of trusts that are being brought into force just now. In the case of intestacy, or in the case of a trust formed before a testator knew of the existence of this company, he might not give power to charge.

2296. Obviously the case does not arise as regards a trust which was incepted and created before the existence of your company; of course no question can arise in that case?—No. In the case of a trust created before my company was known to the testator, the question of authorising payment of a trustee company was not likely to arise in his mind.

2297. Therefore, that can be no obstruction to the progress of your company?—Pardon me; very often we find in Scotland (and I have no doubt it also obtains in England) that the trustees appointed by a testator either die or decline to act. The trust then is left without anyone to manage it. If there is absolutely no trustee they must go to the court. There is no provision in law at present by which a body of trustees who desire to refuse to act any longer can avail themselves of a trustee company, because they have no authority to pay it.

Mr. *Warmington*.

2298. What you really mean is this: that in consequence of the law being as it is, there is difficulty in the company accepting a trust, because, if they do, they will have to act like other trustees, gratuitously?—That is so.

Mr. *Kimber*.

2299. That only applies to a pre-existing trust, created long before the existence of your company was contemplated by a testator?—Yes, or where authority to charge is not given.

2300. Then that disability amounts to this: that, as regards trusts which existed before your company came into existence, having a vacancy in the office of trustee, there is nothing in the law which would induce them at present to appoint a new company like yours as new trustee?—We can under the law of Scotland act in

Mr. *Kimber*—continued.

certain circumstances as trustee and executor, but we are put to great shifts to do the work; and the mere fact that there is no direct recognition by the law of the principle of a trustee company makes it quite a common opinion in Scotland that a trustee company cannot act. I know that it can act, but the great bulk of the people do not know that it can.

2301. But you do not want an Act of Parliament merely to correct their opinion of what the law is?—Oh dear no.

Dr. *Farquharson.*

2302. I think it follows from your evidence that there has been a good deal of difficulty of late years in getting private trustees to act?—In Scotland that has been so, and it is getting more accentuated every day.

2303. Was your company started in consequence of any strong expression of public opinion that some change was necessary in that respect?—The company was started principally because those who were connected with its inception had had practical experience of the dangers, difficulties, and disadvantages of the present system of trustees. They made a number of inquiries, and they found that the opinion was generally held that some remedies were absolutely essential for the relief of trustees. We went over the systems which obtain in other countries, and we came to the conclusion that a system which had been so successful in Africa, Australia, and the United States, namely, the employment of paid corporate trustees, was the one best suited to help matters.

2304. And that objection to act became accentuated, I think you said, after the City of Glasgow Bank failure?—Yes, to a very marked extent, because in that case there were quite innocent breaches of trust committed by trustees, or rather trustees were found liable for very large sums of money, and they were totally unaware that any liability of the kind existed.

2305. Was the City of Glasgow Bank investment authorised by law?—I do not think so; but the trust deed might give such a power of investment. As a matter of fact, the liability arose in this way: that the bank insisted upon the trustees putting their individual names on the register as the holders of the stock. They held the stock in trust, it is true; but when the liquidators of the bank came to make claims the names of those appearing on the register were the names of those liable for claims, and the trustees were forced to pay out of their own individual estate.

2306. It is your opinion that if those difficulties which you have described were removed there would be a large scope for the operations of your company?—Yes.

Mr. *Greene.*

2307. Does your company do any other business at all besides that, any financial business?—None whatever. I am strongly of opinion that that would be absolutely fatal to its success.

2308. Is there any restriction or limitation in the Articles of Association as to the investments in which you may place your funds?—Yes; our Investment Clause is much the same I think as

Mr. *Greene*—continued.

that of the Scottish Widows' Fund, which is a large insurance company in Edinburgh.

2309. I see this is the ordinary investment clause; but is there anything to restrict you as to the banks you may use, or the amount you may hold on deposit out of your funds for which you act as trustee?—Not as a rule. In fact the articles of association provide that separate bank accounts be kept for each trust. We employ one of the Scottish banks, as a matter of fact, and there is no admixture of the company's funds with any trust funds.

2310. Then supposing a bank failed and you had got a lot of your trust money in it, you would have to make it good to the *cestui que* trusts out of the uncalled capital of your company?—Yes, or out of the paid-up capital, provided always that the employment of the bank was *ultra vires* of the trust deed.

2311. Then the security of the *cestui que* trusts must depend upon whether or not in the aggregate of all your investments and deposits in the banks you have sufficient to protect yourselves?—Yes, but no such question of security can arise, except in the unlikely case of a trustee company acting outside of the powers of the trust deed.

2312. And also having regard to the subscriptions of the shareholders that are not fully paid up?—We propose that the minimum guarantee to be offered by a trustee company should be its paid-up capital invested in Government or similar securities as the guarantee fund.

2313. But your obligation towards those *cestui que* trusts may be larger than the amount of the paid-up capital?—Yes; still that guarantee is better than nothing, and at the present time none exists.

2314. It may be very inadequate?—It may be; therefore that would be a matter, if any public Act were passed, that provision should be made as to the specific sum to be invested in the name of Board of Trade officials in consols, or whatever it might be.

2315. And also to make provision that, supposing any banks failed in which you put your *cestui que* trusts money, you would still have enough to make good all possible claims?—Yes, in cases where we had no power under the trust deed so to deposit the funds.

2316. You are paid by commission?—Yes.

2317. May I ask about what it comes to?—The rates charged you will find on the paper I have handed in.

2318. It is a commission of 1 or 2 per cent., is it not?—It varies from ½ per cent. up to about 5 per cent.

2319. Does that include any legal costs which are incurred on the advice of a solicitor?—The legal costs must be paid together with the necessary outlays over and above the commissions.

2320. When you say legal charges, do you mean the cost of consulting a solicitor?—I mean the cost of the preparation and drawing of deeds, and all purely legal work.

2321. Then in your commission you provide a certain amount of law?—We do administrative work—in short, act practically in the same way as individual trustees *ought* to do. We might

Mr. *Greene*—continued.

might require to consult a solicitor with regard to that.

2322. And the cost of that you bear?—I refer you to the following, which are the standard charges of the company:—"I. In cases where the company is appointed as executor and has only to realise and divide property, the following commissions will be charged: (1.) Upon land, house, and other real property where the value does not exceed 2,000*l.*, 1 per cent.; exceeding 2,000*l.*, but not exceeding 5,000*l.*, 1 per cent. on the first 2,000*l.*, and ½ per cent. on the balance; and exceeding 5,000*l.*, 1 per cent. on the first 2,000*l.*, ½ per cent. on the next 3,000*l.*, and ¼ per cent. thereafter. (2.) Upon policies of insurance, where the capital sum does not exceed 500*l.*, 1 per cent.; exceeding 500*l.*, and not exceeding 2,000*l.*, 1 per cent. for first 500*l.*, and ½ per cent. on balance; exceeding 2,000*l.*, 1 per cent. on first 500*l.*, ½ per cent. for the next 1,500*l.*, and ¼ per cent. thereafter. (3.) Upon book debts, furniture, and miscellaneous property, not exceeding 500*l.*, 3 per cent.; exceeding 500*l.*, and not exceeding 1,000*l.*, 3 per cent. on first 500*l.*, and 2½ per cent. on balance; and exceeding 1,000*l.*, 3 per cent. on first 500*l.*, 2½ per cent. on next 500*l.*, and 2 per cent. thereafter. (4.) Upon stocks, promissory notes, bills, bonds, mortgages, &c., not exceeding 500*l.*, 1 per cent.; exceeding 500*l.*, and not exceeding 2,000*l.*, 1 per cent. on first 500*l.*, and ¾ per cent. on balance; exceeding 2,000*l.*, and not exceeding 10,000*l.*, 1 per cent. on first 500*l.*, ¾ per cent. on next 1,500*l.*, and ½ per cent. on balance; exceeding 10,000*l.*, 1 per cent. on first 500*l.*, ¾ per cent. on next 1,500*l.*, ½ per cent. on next 8,000*l.*, and ¼ per cent. thereafter. II. In cases where the company is appointed to act as trustee, and takes over property for the purpose of holding same, either under a will, or marriage, or other settlement, and collecting and paying or dividing the income, the following commissions shall be charged:—(A.) An introductory commission, according to the nature and value of the estate as follows, namely: (1.) Upon, land, house, and other real property, when the value does not exceed 2,000*l.*, 1½ per cent; exceeding 2,000*l.*, and not exceeding 10,000*l.*, 1½ per cent. on the first 2,000*l.*, and 1 per cent. on the balance; and exceeding 10,000*l.*, 1½ per cent. on first 2,000*l.*, 1 per cent. on next 8,000*l.*, and ½ per cent. thereafter. (2.) Upon policies of insurance, when the capital sum does not exceed 500*l.*, 1½ per cent; exceeding 500*l.*, and not exceeding 2,000*l.*, 1½ per cent. for first 500*l.*, and 1 per cent. on balance; exceeding 2,000*l.*, 1½ per cent. on first 500*l.*, 1 per cent. for the next 1,500*l.*, and ½ per cent. thereafter. (3.) Upon book debts, furniture, and miscellaneous property, not exceeding 500*l.*, 3½ per cent; exceeding 500*l.* and not exceeding 1,000*l.*, 3½ per cent. on first 500*l.*, and 3 per cent. on balance; and exceeding 1,000*l.*, 3½ per cent. on first 500*l.*, 3 per cent. on next 500*l.*, and 2½ per cent. thereafter. (4.) Upon stocks, promissory notes, bills, bonds, mortgages, &c., not exceeding 500*l.*, 1½ per cent.; exceeding 500*l.*, and not exceeding 2,000*l.*, 1½ per cent. on first 500*l.*, and 1¼ per cent. on balance; exceeding 2,000*l.*, and not exceeding 10,000*l.*, 1½ per cent. on first 500*l.*, 1¼ per cent. on next 1,500*l.*, and 1 per cent. on balance; exceeding 10,000*l.*, 1½ per cent. on first 500*l.*, 1¼ per cent. on next 1,500*l.*, 1 per cent. on next 8,000*l.*, and ½ per cent. thereafter. (B.) An annual commission on the income for the trouble of collecting and distributing the same as follows, namely: where the income is collected or paid in sums not exceeding 100*l.*, 2½ per cent.; where the sums collected or paid are larger than 100*l.*, but do not exceed 200*l.*, 2 per cent.; where they exceed 200*l.*, 1½ per cent. All disbursements and legal and other expenses made in connection with the capital or the income of estates will be made by the company and charged. III. The company's charges for acting as factor, manager, attorney, &c., necessarily vary very much, according to the work to be done, and therefore under this head special terms for each case will be quoted upon application to the company. The above are the usual charges made by the company, but special circumstances may warrant or necessitate some decrease or increase in these charges. The directors are always ready to consider any case on its merits, with a view to making special terms."

*Thursday, 28th March* 1895.

MEMBERS PRESENT:

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|---|---|
| Mr. Attorney General. | Sir George Osborne Morgan. |
| Dr. Farquharson. | Sir Charles Pearson. |
| Mr. H. D. Greene. | Sir Henry Roscoe. |
| Mr. Kimber. | Colonel Howard Vincent. |

MR. ATTORNEY GENERAL, IN THE CHAIR.

Mr. HERBERT RIDLEY BOYCE, called in; and Examined.

*Chairman.*

2323. You are, I believe, a solicitor?—I am.

2324. And since February 1889 you have been manager of the Trustee Department of the Trustees and Executors Corporation?—Yes.

2325. I believe that Corporation was formed in December 1887?—Yes.

2326. And one purpose was the taking of trusteeship and executorship business?—Yes.

2327. And I believe that in the Corporation's prospectus that was held out at the time as its principal object?—That is its first object, as stated in the prospectus.

2328. You I think have been concerned alone with the trustee branch?—That is so.

2329. It has been considerably limited in the extent of its operations, has it not?—Yes. Of course, apart from the ordinary difficulties which exist for any company there have been special difficulties with this company.

2330. I will ask you about them in a moment; but to begin with: did you have numerous inquiries upon the subject?—Yes; in the course of the first three years of my service with the Corporation we had over 600 inquiries.

2331. That is to say, inquiries from persons who contemplated using the Corporation for the purpose of trusteeship and executorship?—Yes.

2332. Did you, from that, form any opinion as to any extensive desire for some means of having other than private trustees?—Certainly; in particular, I think the inquiries were made by people who desired to be relieved of the burden of trusteeships.

2333. Have you had many applications from persons who contemplated appointing your Corporation trustee in the first instance?—Yes.

2334. And appointing them executors?—Yes.

2335. Were any of those inquiries from members of the legal profession?—Some of them were.

2336. Did you form any opinion as to the views entertained by the public upon this subject?—It seems to me there are two wants in the public: one is a want for security and good administration, and the other a want, as I say, for relief from trusteeships.

2337. The relief of those who are acting as trustees you mean?—Yes, who are often busy professional men, or men carrying on business in the city.

*Chairman*—continued.

2338. Did you find that the desire for security was the predominant desire?—No; I should have said that it was the other way.

2339. To get rid of the trouble?—Yes.

2340. In point of fact, I believe you have only proved 11 wills since 1887?—Yes, we have been appointed under between 80 and 90 wills, but only 11 have come into operation.

2341. You mean that the other gentlemen are happily alive still?—Yes.

2342. You have also undertaken, I believe, about 35 private trusteeships?—Yes.

2343. In regard to those, were they of a character involving discretion?—Only in one case have we had to use discretion. I have two more cases pending at the present moment.

2344. In the remainder it was simply, I presume, a case of receiving and keeping the money and applying it according to the directions of the trusts instrument?—Yes. Of course cases of discretion may arise under any of those.

2345. In regard to investments and so forth?—Yes, or in regard to infants.

2346. By whom would that discretion be exercised if it were necessary in the case of your Corporation?—By the board.

2347. By the directors?—Yes; I should consult with some member of the family and the family solicitor, and report the result to the board, who would consider the circumstances and act accordingly.

2348. What is the charge that your Corporation propose to make in reference to these matters?—Where we act as executors we charge a sliding scale on the capital, and where we act as trustees also we charge 2½ per cent. on the income. As executors we charge first an initial fee of 2½ per cent. on the capital up to 2,000*l.*; 1 per cent. up to 15,000*l.*; ¾ per cent. from 15,000*l.* to 30,000*l.*; and ½ per cent. above 30,000*l.*

2349. That is a charge once for all, is it?—No. That is a charge for acting as executors.

2350. But that charge is not repeated?—That charge is not repeated.

2351. That

*Chairman*—continued.

2351. That is what I mean by a charge, once for all. Before I depart from that, I had better ask you some other questions about it. Does that charge include the taking of any legal advice?—No; that is in addition to the usual out-of-pocket payments to solicitors or brokers, or other professional people.

2352. Do you, on such occasions, employ your own solicitor, or do you employ the solicitor of the family?—The family solicitor.

2353. In addition to that charge, what are the other charges that you make?—An annual charge of 2½ per cent. on the income where we are trustees. If we are simply executors, and have to wind up an estate and distribute it, the initial charge covers everything. If we have a trust continuing, we charge 2½ per cent. during the continuance of the trust. In a new trust, where we are simply trustees, and get no fee as executors, we should charge ½ per cent. on the capital on final distribution of the fund.

2354. In addition to that business, you have undertaken, I believe, over 50 trusteeships for debenture holders?—Yes.

2355. And you hold about 70 wills of living persons, under which you are appointed executors?—Yes.

2356. That you would regard as being a small success hitherto, would you not?—Financially, of course.

2357. But, in the case of your company you undertake not only trustee business, but a variety of other businesses of a less secure character?—Yes.

2358. I will not ask you about the affairs of the Corporation, but, in point of fact, difficulties have arisen, have they not, with regard to them?—Yes, the company has been embarrassed.

2359. But do you consider that the trustee business of your Corporation has been hampered by its association with its separate financial business?—Most seriously.

2360. You, I believe, do keep all your trust funds in separate accounts so that they cannot be put in jeopardy by any other financial operations?—That is so; they are kept quite distinct.

2361. But, nevertheless, I suppose the fact that you have been doing another class of business has affected your business of that character?—Certainly.

2362. Do you think that any company carrying on speculative business also is a suitable instrument for acting in regard to private trusts?—I do not think they would get the business.

2363. I believe you consider that the want of legislative facilities has impaired the usefulness of your Corporation?—Certainly.

2364. You have, I suppose, to get the trusts put in the name of individual directors?—Only existing trusts.

2365. You contemplate that the Corporation itself might act under the law as trustee?—Yes, in all new trusts you can appoint the Corporation; or you can appoint the Corporation executors.

2366. When you have had to deal in your limited experience with these family and other affairs, have you found any reluctance on the part of members of the family to impart their confidence to you?—No.

*Chairman*—continued.

2367. Have you found it easy to ascertain the circumstances of the family and other matters requisite in your judgment?—I have never met with any difficulty. I have had to go down to the houses of complete strangers, where we have been executors, on several occasions, and inquire into their family affairs, and look through private papers; and I have never had any difficulty.

2368. Have you found that members of the legal profession, solicitors that is to say, have been favourable to your project?—No, they are not; they look jealously I think on any professional trustee.

2369. Do you consider that an official or public trustee, or your company acting in that capacity, would to any extent interfere with their professional work and position?—Inevitably, I think to a certain extent.

2370. I believe you have also visited provincial towns in 1889, with the object of informing yourself as to the views which were entertained as to a company acting as trustee?—Yes.

2371. In seven or eight of the leading places in England?—Yes.

2372. You have not gone to Scotland at all, I think?—No; Scotch law is so different.

2373. You preferred to confine yourself to England?—Yes.

2374. What was the general result of your inquiries?—Certainly, that the opposition of solicitors would be much more marked in the country than in London. The competition in local places is very much greater between different solicitors in the same town, and they look very jealously after their connection. I was told in Birmingham that there the people were conservative in their views, and would be very slow to adopt a new business, and that it would be no use starting a business there until it had been well established in the capital, in London. One would have thought Birmingham would have started a new business; but it was not so.

2375. Without desiring to particularize about classes of individuals, have you found that, apart from solicitors, those with whom you conferred were favourable to the idea?—The accountants certainly were not, and I saw several accountants.

2376. Was the adverse feeling restricted to solicitors and accountants, so far as you could judge, or did it extend more widely?—I interviewed chiefly, almost entirely, solicitors and accountants. I did see bankers in one or two places.

2377. The Lord Chancellor, when he came and gave his evidence to us, suggested that the district registrars might be appointed public trustees throughout the country; what do you say in regard to that?—It seems to me, in the first place, that you are selecting a set of men who have been chosen for other purposes altogether. If you want a public trustee to be a man who can administer well any trust that is brought to him, no doubt a district registrar could do it very well; but if you want a man who would attract business, or popularise business, I should have thought you would do better to select a special agent.

2378. Do you wish to make the thing purely optional, so that those who liked might avail themselves of it, and those who did not like it might

*Chairman*—continued.

might let it alone. Would you have any objection to the district registrars?—Except that the district registrar would not necessarily be the best man to attract business, and there is an objection to him on the ground that he is a practising solicitor.

2379. You mean, in fact, that they have a practice of their own?—Yes, they have a practice of their own, and they would not readily get trust business from the clients of other solicitors in the same town.

2380. Your corporation naturally, being a business corporation, desires to attract business: but supposing it were a public department, or a public functionary, under the control of the court who would not want to attract business, would you see any objection to the gentlemen in question, that is to say the district registrars, acting?—No.

2381. I do not know if it is the case, but I rather infer that you think that companies carrying on business as public trustees and competing one with the other would be the most effective instrument for the purpose; or do you consider that a public trustee officially appointed and responsible would be preferable?—I think that a good company would compete very favourably with a public trustee.

2382. Are you aware of any case in which a public company has had any success worth speaking of in that direction?—No.

2383. Are you aware whether it has been tried elsewhere by other companies besides your own?—It has been tried very extensively in the colonies.

2384. But speaking of the United Kingdom?—There have been our own company and the Law Guarantee and Trust Society, and, I saw the other day, the Public Trustee, Limited, in Scotland.

2385. Yes, we have had evidence from that last company; and you say the Law Guarantee Society undertakes business of this kind?—The Law Guarantee and Trust Society.

2386. Can you tell us yourself, are you sufficiently acquainted to be able to inform us whether they have had any substantial business of that kind?—Only from what I read in the paper the other day, when one of the witnesses gave evidence on the subject before this Committee.

2387. You know nothing more than that?—Sir Henry Parker, the chairman of the company, told me one day that they were doing nothing and that they were waiting for the passing of Lord Herschell's Companies' Bill.

Sir *George Osborne Morgan.*

2388. But they have only been in existence a few years?—They have been in existence six or seven years.

*Chairman.*

2389. Do you think that if a public trustee was officially appointed he should be bound to take any trusts that were imposed upon his shoulders?—I make that suggestion. I think it is a question whether he should not be a public servant.

2390. Would you be prepared in your corporation to undertake the management of a business, even temporarily?—We have done it. We should not do it if we could help it.

*Chairman*—continued.

2391. But it would be only temporarily, with a view to its being wound up or disposed of?—Yes, unless it was by special arrangement. I have carried on a business temporarily for over a year.

2392. Is it your view that if an official trustee were appointed there ought not to be a monopoly for the State?—Yes, that is the view I should represent to the Committee. We and other companies have spent a good deal of money in trying to get a business together, and it would be rather hard upon us if there were anything of that sort.

2393. I should like to ask you about that; do you put it in the sense of interfering with a vested interest which would make it unfair to compete with you?—One does not like to use the word "unfair," but I think that we are entitled to consideration.

2394. Does your view as to consideration extend to depriving persons who are not prepared to do business with your company of the facilities of getting a public trustee if it were otherwise advisable?—No, I did not suggest that. I do not suggest that a public trustee should not be appointed, but that the two Bills should go through together.

2395. A Bill like Lord Herschell's Companies' Bill?—Yes, a Bill like Lord Herschell's Companies' Bill; it should go through side by side with the Bill for a public trustee.

2396. Supposing that that were done, do you think it would be desirable to impose, as is done in the case of insurance companies, if I remember rightly, as a condition upon a company carrying on that business a deposit of some large sum of money as a security?—Yes, that was contemplated by Lord Herschell's Bill.

2397. I was not aware of that?—And by a Private Bill which we introduced.

2398. In fact, the Government do issue life insurances to a large extent, no doubt, and that business is also done by numerous insurance companies, as we know; and you rather contemplate that private adventure companies should be allowed to compete with the public official?—Yes.

2399. What have you found in regard to the evidence that you are in the habit of acting upon; do you find difficulty in satisfying yourselves as to the facts sufficiently to enable you to dispose of the trusts?—No; because I have always been brought into personal contact with the families, with the beneficiaries. In fact, I have made a point rather of making their personal acquaintance; and we are represented by the family solicitor, so that we can get at the facts.

2400. In fact, you can deal with it as a matter of business without being encumbered with the necessity for judicial sanction at each step?—Yes.

2401. Or of being encumbered with the necessity for strict evidence, such as you suppose judges and judicial persons must act upon?—Yes.

2402. There is one observation I think you want to make, and are entitled to make, and that

is

*Chairman*—continued.

is in regard to the money that you receive as trust money; I believe that your company have never touched or speculated with other people's money at all?—No.

2403. But that you have kept it strictly separate and apart?—Yes.

2404. Applying it to the purposes of the trusts solely?—Yes.

Sir *George Osborne Morgan.*

2405. I think you said that you have never found any difficulty in discharging the trusts which you have undertaken?—Yes.

2406. Have you ever refused to undertake any trust on account of its intricacy or difficulty?—No; but we have refused to undertake trusts on other grounds. Yes, we did refuse one on the ground of difficulty; we were once asked to undertake the trusteeship of a will that involved the carrying on of a private lunatic asylum, and we declined it.

2407. That was an exceptional case?—Yes.

2408. As a rule, you have undertaken all the trusts offered you, I presume?—No, there are others that we have refused. We declined to undertake a simple trust of furniture, and we declined to undertake a trust where the fund consisted entirely of bank shares.

2409. Have you ever been actually saddled with any liability on account of anything arising out of a trust?—No.

2410. You have never had to pay anything in that way?—No.

2411. You said that solicitors as a general rule exhibited some distrust or dislike towards your company, or rather, to put it in another way, that it was unpopular with solicitors?—Yes.

2412. But have not the solicitors got an association of their own, this very Law Guarantee and Trust Society that you were speaking of, which is managed entirely by solicitors?—That is so.

2413. Might not that perhaps account, to a certain extent, for your rival association being unpopular with them?—I do not think that would account for the solicitors in the country at any rate.

2414. But they have a great many directors in the country, I believe; they have a director in almost every large town in England?—Yes, but I do not think they are doing this style of business to any great extent. I saw a gentleman in Birmingham who represented them there, and he did not even know that they undertook trust business; that was in 1889.

2415. Have you read the Bill brought in by my honourable friends, Colonel Howard Vincent and Mr. Warmington?—Yes, I have read the Bill of 1890. I do not know whether there has been a later one.

2416. May I ask what your opinion of the proposal embodied in that Bill is?—I think it is a very good proposal.

2417. But still I understand you to prefer, and perhaps naturally, that the business should be managed by companies rather than by a public trustee; is not that so?—Yes; I want facilities which would enable me to compete with the public trustee if he is appointed.

Sir *George Osborne Morgan*—continued.

2418. But is that the only ground of your approval of this Bill; I do not suppose it is the only ground?—No.

2419. Could you state generally upon what grounds you would suggest that this trustee business would be better managed by a company like yours than by a public trustee?—I should say that the office of a public trustee, if it is carried on in the same style as ordinary Government offices, would be too stiff; I mean that the methods would be too stiff and formal for dealing with trust business.

2420. You think that there would be too much red-tapeism about it?—Yes; he would have to deal here with the widow and the orphan, and I do not think that the ordinary style even of an official letter is suitable for that.

2421. And, as I gather from your evidence, you, as representing the company, would be able to go down and see the people themselves, and talk with them, and in that way make the course of business more smooth?—Yes, I have repeatedly done so.

Dr. *Farquharson.*

2422. Are there any other reasons, besides the legal difficulties of which you spoke, that have interfered with the success of your company?—The actual position of the company, to which I have already referred, is well known.

2423. You are doing a very small business, are you not?—Yes.

2424. And your impression is that there is a large demand on the part of the public for facilities such as you offer?—Yes.

2425. Are the legal impediments the only impediments in the way of your greater success?—Yes.

2426. Do the legal impediments refer only to existing trusts, or would they have any bearing upon trusts which are constituted in future?—They would have a bearing on wills. At present the corporation can only prove a will in a roundabout way. They cannot get probate; they have to appoint a syndic, who takes out letters of administration with the will annexed on their behalf, and that syndic has to enter into the usual administration bonds. Under the Bill that Lord Herschell introduced probate would be granted direct to the company.

2427. There is no difficulty in the way of your terms being high or oppressive, or anything of that kind?—No.

2428. Do you think that you do your business cheaper than a public trustee would?—I imagine that a public trustee would charge according to scale too. I do not know.

2429. Your annual charge is on income, not on capital?—Yes.

Colonel *Howard Vincent.*

2430. How much?—Two and a-half per cent. on income; where we act as executors, we make the charge on the capital.

Sir *Charles Pearson.*

2431. Did I rightly understand you to say that your company have promoted a Private Bill?—Yes.

Sir *Charles Pearson*—continued.

2432. Are you registered under the Joint Stock Companies Acts?—Yes.

2433. What was the main purpose of the private legislation which you proposed?—Very much the same purpose as Lord Herschell's Bill; and the Law Guarantee and Trust Society introduced a Bill the same year.

2434. Did your Bill pass through either House of Parliament?—No; we sent a deputation to the Lord Chancellor on the subject, but he said that it was a matter for private legislation, not public.

2435. At present, in England, can a corporation act as executor through one of its officers if so appointed by a will?—They can be appointed executors, and they prove the will, as I have just stated.

2436. In whose favour is probate given in such a case?—The syndic. They have to appoint an individual, who is called a syndic (we have always appointed the general manager), and then we get letters of administration with the will annexed.

*Chairman.*

2437. The executor must be the person named in the will, of course?—Yes.

Sir *Charles Pearson.*

2438. How do you get over the difficulty of the syndic not being named in the will?—We have to nominate him in each case. The will appoints the company trustees and executors.

2439. He turns out to be an administrator, not an executor, then?—The corporation are nominated in the will as executors.

2440. And the syndic becomes administrator?—Yes, with the will annexed; but the grant is expressed to be made for the use and benefit of the corporation.

2441. Does your company keep separate statements or balance-sheets applicable directly to the trustee department?—An entirely separate set of books.

2442. Would you have any objection to say whether that department taken separately has been successful?—So far as the business has gone it has been successful.

2443. Was your company formed before Lord Herschell's Bill was introduced?—It was formed in 1887, and I think, at that time, the same Bill had been introduced by Lord Hobhouse.

2444. Was it in anticipation of the passing of such legislation that your company was formed?—I am not in a position to say that; I was not there originally; I did not come till a year afterwards.

2445. In your opinion, I understand, the passing of such a Bill would greatly facilitate the development of companies such as yours, provided they were confined to strictly trustee business?—I think there are some classes of agency business that could perfectly well be undertaken, and quite safely undertaken, with trustee business.

2446. But excluding what you would call financial business?—I do not think that any company doing financial business would have a chance of success.

2447. If the movement were developed on the lines of public companies, is it your opinion that they would compete successfully with a public trustee created on the lines of the Bills now before Parliament?—I think they would.

Sir *Charles Pearson*—continued.

2448. Is that opinion founded on any view as to the probable costs, or simply upon the elasticity of administration?—Upon the elasticity of administration; and I think a company, as I say, could send down and make the personal acquaintance of the people, and that it would work more smoothly than it would through a public official.

2449. You say that you found solicitors and accountants opposed to the idea of a public trustee; have you of your own knowledge, or in your own experience, come across any desire for it among any other classes of persons or the public generally?—I only argue that from the number of inquiries made when we first started business.

2450. What do you argue from that?—That there is a demand for an official trustee in some form or other.

2451. Public or private?—Yes.

2452. Are you able to say whether that demand is founded in any degree upon the difficulty of obtaining persons to accept the office, or act as trustee?—I should say that it was more from the unwillingness of people to undertake the office; it comes to much the same thing. People often undertake trusteeships when they would very much rather not.

2453. And sometimes they are willing to be nominated, and then refuse to act when the time comes?—Yes, and they would also be glad to be able to be relieved of the office.

2454. Has that case come under your notice repeatedly; has that been assigned as the reason in the case of the applicants you have spoken of?—Yes; several of them said they would be glad to get rid of their trusts. I have had, once or twice, people come in with a letter asking them to be trustees, simply to get particulars of our business in order that they might send them on in reply.

2455. In cases where discretionary powers have to be exercised under the trust instrument, how does your corporation come to a decision on such matters?—What sort of discretionary powers? Do you mean investments?

2456. Take, first, investments; and, secondly, power of advancement to children?—In cases of power of advancement on maintenance I should communicate with the family, or probably I should hear from them in the first instance; I should consult the family solicitor, and put the circumstances before the Board.

2457. And the ultimate decision would rest with your Board of Directors?—Yes.

2458. After consulting, as far as possible, all the private interests?—Yes.

Sir *Henry Roscoe.*

2459. I suppose the object of your society is to give security for the corpus, is it not, mainly; I mean you hold out to the beneficiaries as an advantage that they would obtain a greater amount of security in your case than they would under an ordinary trusteeship?—Yes.

2460. And that, of course, would also be the case

Sir *Henry Roscoe*—continued.

case if a public functionary were appointed?—Yes.

2461. Did you hear the evidence of Mr. Cozens-Hardy?—Yes.

2462. Do you agree with him in his suggestion that, supposing a public functionary were appointed, it should be the Paymaster General?—No; I do not agree with that.

2463. You rather agree with the evidence that we have had from the Lord Chancellor and the ex-Lord Chancellor as to the mode in which it should be conducted?—As to the appointment of a separate official.

2464. You would desire to have a separate department?—Yes.

2465. What advantages does that offer, in your mind, as against the suggestion made by Mr. Cozens-Hardy?—To begin with, Mr. Cozens-Hardy's suggestion, as I understand it, did not get rid of private trustees; he proposed to associate the Paymaster General with private trustees.

2466. No; I think he was distinctly against the association, so far as I remember his evidence?——

*Chairman.*

2467. I think he contemplated that the Paymaster General should be the custodian of the funds, and that the private trustee should discharge the duties under the direction of the court?—Then you would still have private trustees, and I think you would have more expensive machinery than that of a separate department.

Sir *Henry Roscoe.*

2468. The private trustee would be the executor, would he not?—Yes.

2469. To carry out the details?—Yes.

2470. But the safety of the corpus would thereby be insured?—Yes; that would meet the demand for safety, but not the demand for relief from trouble.

2471. Whereas, in the other case, do you think that the appointment of an official would relieve the trustee from trouble?—Yes, because you need have no private trustees.

2472. Is it possible, I mean, that in that case the official trustee should go into all the details of the question; would that be a practicable or possible scheme?—Of course, it would depend entirely upon the lines on which the office of the public trustee was conducted. It would be going very much further, I think, and doing very much more than any Government Office does at the present time.

2473. But you think that, so far as the safety of the capital is concerned, Mr. Cozens-Hardy's proposition would be satisfactory?—Quite satisfactory.

2474. It would therefore be a much simpler plan, though not so far-going as the plan suggested by the two Lord Chancellors?—It would be simpler.

2475. But you do not think it goes far enough?—I do not think so.

2476. I suppose it is clear that with the rate of fees which your company offers, in order to pay your company you must have a considerable business?—Yes.

Sir *Henry Roscoe*—continued.

2477. Are the fees charged by the other companies, which have been quoted the same as yours, do you know?—I think the Law Guarantee and Trust Society charge higher fees. I have not their scale here.

2478. Is the charge which the company make too high to render it probable that people will take advantage of it?—No, I do not think so; they are really hardly high enough to pay, from a business point of view; but I do not think you could put them higher.

2479. Do you think that the business could be conducted by a public official on similar terms?—I should think so, but the business would certainly be a losing one for some few years; at least, I should think so.

2480. You think that the Government would have to pay the expense of the department for some time before it became remunerative?—Yes.

Mr. *Kimber.*

2481. Do I rightly infer from your evidence that you consider this trusteeship business, if carried on as a business, whether by an official trustee or by companies, is a remunerative business, or may be made so?—It can be made so, I should think.

2482. And you consider, at all events, that companies should have the right of undertaking the business even if they have to compete with an official trustee?—Yes.

2483. Do you not consider it a hardship that private industries of that kind, if they are remunerative, should be competed with by a State Department?—I would rather that there were no public trustee, of course, but I am not here to say that; I only want to be put on the same footing.

2484. But assuming an official trustee to be appointed, do you think that you (and when I say "you," I mean your company or other similar companies) could successfully compete in terms and competence with the official trustee?—I think so.

2485. You think you would get business notwithstanding that?—I think so.

2486. I infer also from your evidence that the misfortunes which we all know have overtaken your company upon its commercial side have not interfered in any way to prejudice the trust business?—No, except so far as it has limited the extent of it, of course; but it has not interfered in any way whatever with the conduct of the business.

2487. You have spoken of your having been appointed executors under several wills which you have proved by your nominee; as regards settlements, have you been appointed?—Yes.

2488. In the original inception of the trust?—Yes.

2489. The two points of your Bill, I think, were directed to these two infirmities; in the first place, the not being able to be appointed as a corporation to be executors?—Yes, not being able to get probate.

2490. And, secondly, that as regards existing trusts, it is against the practice, and would not be recognised by the court to be proper that you

Mr. *Kimber*—continued.

should be appointed a new trustee of an existing settlement?—Yes.

2491. But, barring those two points, the law does permit, at present, corporate bodies to be appointed both trustees and executors, does it not?—Yes.

2492. You said that once in the performance of these trusts under a will you had to carry on a business?—Yes.

2493. Would you mind telling us what business that was?—It was a small tallow chandlery business in Liverpool; call it a grocery business.

2494. Did you find that a little difficult?—Yes. It arose under these circumstances: The man died and appointed us executors; he had a daughter, who was about 20, to whom he left everything. When we proved the will in the ordinary way we should have wound up the business; but this girl had assisted him in carrying on the business for some time, and was quite competent to do it herself, and it was represented to us that it would be very hard on her if we sold the business and took away her living, when she would be 21 the next year.

2495. Then it was as a matter of considerateness?—Yes, we acted with the sanction of an order of the court.

*Chairman.*

2496. Did you carry it on successfully?—It was an infinity of trouble to us; I cannot say whether it paid or not. The girl is of age now, and has taken it over.

Mr. *Kimber.*

2497. I take it that if an official trustee happened to be executor in such a case, it would probably be a great deal more difficult for him to exercise that discretion and considerateness than for you?—Probably; and of course we had a local office in Liverpool. We have carried on farming also.

2498. You said that you considered that any system of public trusteeship would necessarily interfere with the business of solicitors?—Yes.

2499. Are you aware that the representatives of the Incorporated Law Society of this part of the United Kingdom, and also of Ireland, have given evidence to the contrary effect, namely, that they consider that it would rather give business to solicitors?—I was not aware that they had said that.

2500. They have done so, if you will take it from me?—Of course.

2501. But would you mind getting a little closer to the question and telling me how exactly a solicitor's business, in your opinion, would be interfered with or lessened?—If you have a permanent trustee, there will never be any fresh appointments. New appointments of trustees, I should say, give a great deal of business to solicitors.

2502. They would lose the business in the appointment of a new trustee?—Yes, and frequent applications to the court for the same purpose.

2503. Why?—For appointing new trustees.

2504. Why should there be applications to the court for that?—Because, as a matter of practice, you frequently have to get the court to appoint new trustees.

Mr. *Kimber*—continued.

2505. Can you tell me in what case now it is necessary to go to the court at all for the appointment of new trustees?—I am not prepared with an instance, but it frequently does happen.

2506. That is one case; but would you suggest that the official trustee, when he was called upon to exercise discretion (as distinguished from the mere distribution of money), such as the granting of leases, exchanging property, carrying on a business, giving consent to the marriage of a daughter, providing maintenance, and, in particular, in the crucial case of applying the capital of the fund towards maintenance, and advancing an expectant share, should act upon evidence, or, if not, upon what information should he act?—I think a public official would have to act on evidence of the facts of the case.

2507. Would not that evidence have to be prepared or advised upon by solicitors?—Yes, probably.

2508. That would happen in the case of the exercise of every discretion arising under a trust, would it not?—Probably.

2509. And that would happen many times more frequently than a change of trustee?—It might be so.

2510. Does it not occur to you, as it does to me, that that would involve and create a great deal more professional solicitors' work than exists or is necessary now?—That had not occurred to me.

2511. In the present case do you not consider that the practice which now exists of private family trustees, some members of the family or collateral branches, being appointed, has arisen out of the instincts of the people, and has arisen from natural causes; that is to say, their services are generally gratuitous, are they not?—Yes.

2512. It suits the habits of the people or it would not have been done?—Certainly.

2513. When these discretions have to be exercised by trustees who are members of the family, and already know all the circumstances, you would think it absurd, would you not, if when a question arose of an advance to a son out of his capital to go to college or to be apprenticed, or a daughter to be married and have a settlement made upon her, a private trustee were to call upon the members of the family to bring evidence before him, in the same way as would have to be done by an official department?—Certainly.

2514. Does it not come to this: that the present system exists because it suits, and has arisen out of the genius and instincts of family life in the country?—There has never been any other alternative, you see, at present; people have had no choice hitherto.

2515. Pardon me; you have said that the present private trustees are generally gratuitous?—Yes.

2516. It is inferrable, therefore, reasonably that families consider it is a duty to one another to act gratuitously in the performance of those trusts?—Yes.

2517. Was not there always the alternative of the

Mr. *Kimber*—continued.

the family going to the banker or solicitor, or even to an official, and saying, "Take care of my funds; be my trustee"?—Yes, they often do so.

2518. I do not know whether you have heard the dictum of the late Vice-Chancellor Malins, who said in open court (I happened to hear him) that if he were a man of wealth, which he was not, he would turn it all into Consols and put it into the name of the Accountant General of the Court of Chancery; but, however, you are conversant with what is possible now, and that is, that by a very simple procedure in judges' chambers it is possible to put the whole of the funds into court, or under the protection of the court, in such a simple manner that neither capital nor income can be appropriated without the direction of the judge in chambers?—Yes.

2519. And you are aware that the direction of a judge in chambers can at all times be very speedily obtained?—Yes.

Colonel *Howard Vincent.*

2520. Are you a solicitor or a barrister?—A solicitor.

2521. How long, do I understand, have you had charge of the trust business of this company?—Six years.

2522. I suppose you have found that people are very reluctant to put trusts in a company where there is a speculative business attached to it?—It has been so lately.

2523. It was not so much so in the first instance?—Not so much.

2524. It was not so prominently brought before them?—No.

2525. You consider that it would be very much better if trust companies allowed to undertake trust business were detached from speculative business?—Yes.

2526. Do I correctly understand that the Law Guarantee and Trust Society undertake private trusteeships?—Yes.

2527. Not trusteeships for debenture-holders, but private trusts?—Both, I think. I know they have power to do so.

2528. Do you know to what extent they have done so?—I think Mr. Hunter, who gave evidence here, said that they had acted in 21 cases.

2529. The present system of private trusteeship entails very considerable costs upon the trust estates, does it not, in the appointment of new trustees and changes of investment, involving a great deal of correspondence, all of which has to be paid for?—Usually, I suppose, private trustees would consult their solicitor about changes of investments.

2530. And your opinion, having studied the question closely, is that the charges either of a private company or a public trustee would not be much in excess of many charges that arise at the present time out of the administration of trust estates?—I should think not, but it is difficult to say.

2531. Your general opinion, I mean, is that there would not be a very material increase of expenditure?—Possibly not.

2532. Take your own case; if anybody came to you and wanted to put a private trusteeship into the hands of your company, should you say to them that it would be much more expensive if they did so?—I should tell them that our charges were so much, and that they would have to pay those charges in addition to all extra payments to solicitors where occasion arose.

Colonel *Howard Vincent*—continued.

2533. Then your charge of 2½ per cent. is on the income?—Yes.

2534. That is not an inclusive charge; you make an extra charge for the transfer of investments?—No.

2535. You do not make a charge per letter?—No; we only charge 2½ per cent. on the income, and that covers all our duties.

2536. Do you employ the family solicitor, accountant, banker, and so on?—Yes, the family solicitor.

2537. You do not transfer the business to your own solicitor?—No.

2538. You continue to administer the trust estate, so far as you can, through the family solicitors, bankers, and accountants?—Yes.

2539. Do you see that any difficulty would tend to follow if a public trustee were appointed?—No.

2540. Although the number of trusteeships which have been committed to you is not very large, you have had a large correspondence upon this subject extending over these six years?—Yes.

2541. And your opinion is strong that there is a demand for the creation of a public body, either a Government officer or some private company?—Certainly.

2542. At the present time can your company be appointed trustee as a company?—Yes; of a new trust, not an existing trust.

2543. But they cannot be appointed executor, I think?—They can be nominated executor in the will.

2544. Is not that done in the name of the chairman of the company or the vice-chairman?—The will would appoint the corporation executor, but they can only prove the will by appointing somebody to take out letters of administration, with the will annexed.

2545. That is by one of its officials, I suppose?—Yes.

*Chairman.*

2546. I should like to ask you one or two questions that have occurred to me; you have found a great advantage in being able to go down and talk to people about their affairs?—Yes.

2547. Widows and orphans, as you said, and so forth?—Yes.

2548. In order to learn what is wanted?—Yes; you get them to trust you.

2549. Do you think it would be possible to impart a similar elasticity to a public functionary?—I do not see why not.

2550. He might inspire confidence in the same way, I mean?—Yes; I do not see at all why a public trustee should not do the same thing.

Sir *George Osborne Morgan.*

2551. You do not see why a public trustee should not go down into the country and see the widow and orphans?—He or his representative.

Mr. *Kimber.*

2552. Or the young ladies about to be married?—No.

*Chairman.*

2553. It is the case, is it not, that the jurisdiction over wards of court is exercised by Her Majesty's judges?—Yes.

2554. Have they any difficulty themselves in dealing with the young ladies about to be married?—I never heard of it.

2555. Does the Chief Clerk or his representative ever interfere in those delicate matters?—The cases are brought before them, I believe. I never have had actual experience of it.

*Chairman*—continued.

2556. There is one more question I want to ask you, when you make your covering charge, and also you have to incur expense for solicitors and other expenses of a light kind; have you found that the total amount of what you charge, that is to say, not merely your percentage, but the added items in consequence of employing solicitors and others has been made the subject of complaint as being excessive?—No.

2557. You have never found that?—No.

2558. The beneficiaries have not complained of anything being excessive?—No.

2559. You have had no complaints of that kind?—No.

The Honourable Lord M'Laren, called in; and Examined.

*Chairman.*

2560. You have been kind enough to come and help us on this matter, and you are, as we know, one of the Lords of Session in Scotland?—Yes.

2561. In your practice at the Bar, and especially as consulting counsel, did you become very familiar with trust law and trust matters?—Yes, I was very often consulted about trust matters, and I also had a certain acquaintance with the English system; but of course I am not nearly so familiar with that as with the Scottish system.

2562. And, as a judge of course, I presume that you have had to deal with cases involving liabilities on the part of trustees?—I tried some very heavy cases of trust liability during the time I was Lord Ordinary (two of which went to the House of Lords), arising chiefly out of the fall in the value of property within the last 20 years.

2563. Is there any difference between the law of England and the law of Scotland in regard to the liability of trustees?—So far as I am aware, there is no difference. I think it has been laid down by the House of Lords that the rule of liability is the same, and it is a rule derived from the Roman law, that every trustee is responsible for the same diligence which a prudent man of business would use in his own affairs.

2564. There are recent cases upon the subject which you have been kind enough to give me a note of?—Yes, I think the two cases that I mentioned (two of the latest cases in the House of Lords, are *Whitely* against *Leroyd*, and *Knox* against *Mackinnon*. The latter is a Scotch case. I refer to those as containing a statement of the rule of law, nearly in the terms I mentioned, by Lord Herschell who gave the leading judgment in the latter case.

2565. There is some practical difference in the law of England and the law of Scotland in the mode of administration, I think, and in the provisions for supplying vacancies in a trust?—In Scotland the practice of paying funds into court is entirely unknown, unless it were in a case where the trust funds were in actual peril; then an Order might be made upon a trustee or an executor to consign the money into court. But, as a rule, in our administration suits there is no paying money into court. The funds remain in the hands of the trustees, and when the order of distribution is made, the legatees discharge the trustees, and the discharges are produced in court, and then a decree of exoneration is granted. I think that is one of the most important differences. Another is that I do not think that in Scotland the system of applying to the court for powers has been nearly so much developed as in England. We have a system of applying by a special case for the determination of any question of law. On the other hand, when trust estates are put under the management of a judicial factor, who is considered an officer of court, he may apply to the court for powers at any time. But our judges have rather leaned to the principle of making trustees use their own discretion and act upon their own responsibility.

*Chairman*—continued.

2566. In Scotland, I believe, it is the universal practice of trustees to act through a solicitor?—I believe it is the practice. I have never known of a trust in which the trustees kept the management of the funds in their own hands and held their own meetings without a solicitor being present; and that is, of course, a certain restraint on the action of trustees.

2567. Am I not right in saying that in Scotland we have often minutes taken by the solicitor of what takes place at the meetings of trustees?—I think so, invariably. And where the matter does not require discussion (for example, if it were only to make an ordinary investment) a minute might be sent round to the trustees for signature. Where there is a discussion the solicitor notes the result of it at the time, and the minute is signed by the trustees.

2568. And in the case of heritable trusts, the solicitor often gets an authority from the trustees, or generally gets an authority from the trustees, to collect rents and dividends, and to pay them over to the persons entitled?—I think that is very common; what is called a factory, that is, a power to act as factor to the trust.

2569. And all the money he receives and distributes are always required to be dealt with by a separate bank account?—That is the practice, to pay the income of the trust into the bank account. Of course, a factory would not extend to dealing with the capital; that could only be done by the trustees themselves.

2570. And

*Chairman*—continued.

2570. And then, in cases of money settled by marriage contracts, the authority is given to the husband or wife, or both, as the case may be, to draw the dividends, and the trustees never hear anything about it, until either death or a change of investment takes place?—I think that is very usual; and I suppose it is so also in England.

2571. In regard to the subject of losses of trust funds, should you say that those losses by the fraud of trustees are common or not?—I think they are very rare, and are almost confined to the case where the fund comes into the hands of a sole trustee. If that trustee is also a solicitor and manages the affairs of the trust, and if he is dishonest or unfortunate in business, of course there is a great risk of loss; because then one of the checks on the action of trustees is removed when the office of trustee is combined with that of agent to the trust. But I have really not known of much trustee money being lost by fraud in Scotland, and think I must have heard of it if there had been any large amount of loss from that cause.

2572. Are there any cases where trust money is lost through the bankruptcy of the solicitor, where he has not paid it into a separate account?—I have known two or three cases of that description where a solicitor had become insolvent through speculation, and it was found that a certain amount of trust money had disappeared in his hands.

2573. Would you suggest any rule that might be applied to the case of the sole trustee, so as to prevent the liability to loss which arises chiefly by reason of his having no coadjutor to check him?—I have sometimes thought that it would be a desirable thing that, where a trustor has appointed a body of trustees and they are reduced to one, the powers of the survivor, or last remaining trustee, should be suspended until he has assumed another trustee to act along with him. It is desirable that the office of trust should devolve to the survivor, because that enables him to appoint a new trustee without going to the court, but it might be combined with the suspension of his powers of dealing with the trust fund until he get a colleague.

2574. A difficulty occurs to me in connection with that which one would like to see removed, if possible, and that is that in the case of a sole trustee, a person remaining as such, if he was disposed to be dishonest there would be no automatic method of preventing him, in the interval before the appointment of the second trustee, from making away with the funds. How would you meet that difficulty?—There would be no way of preventing him disposing of the income of the trust if it were paid to him; but if it were made the rule of law by Act of Parliament that his powers as sole trustee were suspended except to the extent of appointing a colleague, then I suppose he would not be able to realise the trust estate, he would not be able to give a good title to a purchaser.

2575. That would not apply, I suppose, to negotiable securities. Would it be practicable to impose the duty upon companies, for example, whose funds were standing in his name, not to allow the funds to be dealt with?—I see no



*Chairman*—continued.

objection to putting the company under that disability. If they register stock in the names of a body of trustees they would naturally ask for the signature of more than one; and if they were told that there was only one remaining, they would reply: "But you have no authority to transfer this until you get a colleague."

2576. You think that ought to be done, and thus a great protection would be afforded in that way, to trust funds in the hands of one trustee?—I think so. The only difficulty would be in the case of stocks payable to bearer; but I do not know how far it is usual to invest trust funds in that description of stock. It does not seem a very suitable kind of stock for trust investments.

2577. It has been suggested to us, in evidence, already, that trust funds ought not to be allowed to be placed in bearer securities because of the facility thus given to fraud. Do you think that would be a desirable restriction?—I think it undesirable that trust money should be invested in that way, because of the facilities that it would give to fraud; but I understand that very often the actual case is that the testator or trustor has had stock of that description and empowers his trustees to hold it, and one sees a difficulty in interfering with the carrying out of a testator's own directions in regard to the funds that he has left in trust.

2578. There is a process in England called *distringas*, that perhaps your Lordship is familiar with, by which a *cestui que* trust can prevent by notice the disposition of moneys or personal property in the hands of his trustees; is there any similar process in Scotland?—I do not think there is any form equivalent to the *distringas*. If trust funds were in perii, the court might be moved to grant an injunction against a threatened breach of trust, but I do not think there is any process which a beneficiary could use at his own hand.

2579. In addition to the question of fraud, trust estates are exposed to loss where the funds are distributed without reserving a sufficient sum to meet liabilities, are they not?—Yes. I have known cases of that kind, cases that I thought very hard, where trustees have proceeded to apply the income of the trust money to the maintenance of the family, and then, when it turned out afterwards that the funds were insufficient to meet the liabilities, they have had to pay over again. But that is a hardship which, I am afraid, would be incidental to any form of trust administration.

2580. And also there are familiar cases of mistake in paying to the wrong party?—Yes.

2581. And also errors of judgment in improper investments?—Yes. In my experience I have found that improper investments, or injudicious investments, are the main causes of loss to trust estates. In my younger days there was no difficulty in Scotland in obtaining investments for trust money on real securities; but, I suppose owing to the increase of wealth in the country, and the greater demand that exists for securities of that kind, it is very difficult, and sometimes impossible, for a considerable sum of money to obtain a first-class real security. Then trustees are tempted, either from their unwillingness to

*Chairman*—continued.

allow money to lie in bank, or because they are pressed by the beneficiaries to invest it in a way that would give them a good return, to lend on doubtful security, say upon property in the course of building, or perhaps a second mortgage on a country estate which is liable to fall in value. There have within the last 15 or 20 years been a considerable number of cases in court arising out of losses of that kind; and I have no doubt that there must have been a much larger number of cases that never found their way into the court, because beneficiaries being often near relatives of the trustees, and in any case having a friendly feeling towards them, and believing that they have acted for the best, are unwilling to press such claims.

2582. Do you think, in regard to the cases of fraud that do occasionally occur, that it would be practicable or desirable to appoint some sort of public trustee (I use the phrase in the widest sense), in order to guarantee that the corpus of the trust fund would remain intact?—I think it is very desirable where private trustees are unwilling to act, or where a trust has lapsed, that there should be some recognised form of public or official administration; and various forms have been suggested. I heard in the evidence of the gentleman who was examined to-day, particulars which, to a considerable extent, were new to me, of the mode in which trusts could be carried on through a company. I see no objection to a company undertaking the duty of trusteeship on the same conditions as a private individual (such a person as we call a judicial factor), would undertake the management of a trust. A company ought to find security; and, in the case of the exercise of discretionary powers, it is desirable that the company should obtain the authority of a judge for what is proposed to be done. As regards the proposal to have a public or official trustee charged with the administration of vacant trusts, it seems to me that the chief difficulty, if the office were a success at all, consists in the large amount of property and the large number of separate cases that would be under the guidance of one man; and I have a difficulty in seeing how a public official trustee would be able to make himself familiar with the details of all the trusts that are to be under his care. Again, I think that the duties of a trustee are such as ought to be performed by a man of some talent and judgment; and it would not do to delegate those functions to junior clerks; they must be performed personally. If an official or public system of trusteeship is introduced, I should think it would be almost necessary to have a trustee in every considerable town or district of the country, in order that the official might not be overburdened.

2583. Would you think that such an official or officials should be under the direction and control of a court of law—of the judges, that is to say?—If he were a public official, the head of a department, then I should think he might be empowered to exercise trusts without obtaining the authority of the court, because he ought to be a man of the standing of a county court judge at least, a man of legal knowledge and experience who could be trusted to exercise the powers of a judge at chambers. He might have

*Chairman*—continued.

the option in a case of difficulty to go to the court. But in the case of a company, my feeling would rather be in favour of enabling the directors to apply to a judge in the most simple and inexpensive way when they were called upon to exercise a discretionary power.

2584. You would not, as I gather, make the public trustee what is called an officer of the court, who should be merely a deputy of the judge, taking his orders and under his orders, but rather a responsible public officer who should have special facilities for access to a judge for direction?—That would be my view of the proper position of a public trustee; but I may say that my opinion which is mainly founded on my experience of Scotch trusts, would be in favour of official supervision rather than official administration. Our system is that when a trust lapses, or trustees resign, a judicial factor is appointed by the court, and he executes the trust on his own responsibility. He finds security, and is under the control of an officer of court, the accountant of court. Under that system we find that there is absolute security for the safe keeping of trust funds; and the management, I think, is quite as good as that under private trusts. I think that a public officer could very well undertake supervision on a large scale, but it would be more difficult for him to undertake the actual administration of trusts.

2585. The judicial factor is a special creation, specially restricted to Scotland, at present, I think?—Yes.

2586. And we would like very much to know about his position; under what circumstances does the court appoint him?—Sometime in the last century the system began by what is called the Act of Sederunt, a set of rules of court, and the supervision was not very efficient until about 50 years ago. Then, by the Pupils' Protection Act, 1847, all factors who had the management of the estates of minors, absent persons, or insane persons, were put under the supervision of an officer of court, who was then appointed for the first time the accountant of court; and the Act of Parliament laid down certain rules of administration and accountability. Then, four or five years ago, at the time when the present Lord Justice General was in Parliament, he got that system of official supervision extended to factories in private trusts, which had previously been confined to cases of guardianship, and the care of the estates of persons out of the kingdom whose property was unprotected.

Sir *Charles Pearson.*

2587. That was in 1889?—I believe that was in 1889; and now the whole system is concentrated under one department. I think the chief features of the system are these: As soon as the factor enters on his duties, he must give in an inventory of the estate; he has to keep regular accounts which are sent once a year to the office of the accountant of court, and are audited. Then he has to keep a separate bank account for the trust money, and he is liable to a penalty and deprivation of office if he keeps more than 50*l.*, I think, for more than a month in his own possession, or at the credit of his private account.

2588. It is 50*l.* for more than 10 days?—Yes; and

Sir *Charles Pearson*—continued.

and then he is not allowed to exercise any discretionary power without first making a report to the accountant of court, and, if there is any difficulty, that is brought under the notice of a judge. The junior judge has charge of those cases, and he gives the necessary authority. Then, in regard to investments, if there be no speciality, no special authority for continuing the trustor's investments, the factor must conform to the ordinary rules of administration; and if there be any doubtful security, or security which is unauthorised, the accountant of court pulls him up the next time he sends in his account, and makes an order upon him to reinvest. If he neglects to attend to any order, then he is immediately reported to the court, and would be dismissed. When the estate comes to be distributed, the factor generally presents a note to the judge praying for his discharge, and accompanies it with a report from the accountant of court setting forth that, in his opinion, the trust has been duly administered and the legatees paid, and then he gets his discharge. I should be glad to hand in, if the Committee desire it, a note which I have got from the accountant of court of the rules; it is a printed set of rules which he issues for the guidance of factors (*handing in the same*).

*Chairman.*

2589. The judicial factor, I believe, is nominated by the court?—Yes, the jurisdiction being exercised by the junior judge with an appeal to the court if necessary. The appeals are only in cases where the application for a factor is presented by beneficiaries upon the ground that they are dissatisfied with the administration; then the trustees sometimes appeal because they think their character is impugned.

2590. In cases where the trustees have died, or where they have resigned, or where they have declined to act, would a judicial factor be appointed?—He would be appointed, as a matter of course, on the application of anyone beneficially interested. Most usually all the beneficiaries who are of age are made parties to the application, and, if they have arranged with an accountant in whom they have confidence, the judge generally appoints him. Perhaps I ought to mention, in supplement to what I said about the general scheme of factorial administration, that sometimes when a trust consists of a commercial business, or mining, or anything of a speculative nature, the court, in making the appointment, may empower the judicial factor to carry it on; he would not be entitled to do so without special powers.

2591. In those cases in theory, I suppose, the court is the trustee and the judicial factor is the officer or agent of the court?—Yes, that is the theory; but in practice the court never interferes except when applied to, because the judges have not the means of informing themselves.

2592. Are there any persons known to the court who are frequently appointed, or is the man of business, the accountant or the solicitor of the family, usually appointed?—I do not think the solicitors are ever appointed, or scarcely ever. The factor is generally an accountant,

*Chairman*—continued.

and I think the work is very fairly distributed amongst the profession, mainly through the practice of appointing the nominee of the petitioners.

2593. You told us that the junior judge with an appeal had the supervision over judicial factors, as a rule?—Yes.

2594. Can a judicial factor come to the judge and ask him for directions, or must there be a formal application in court in chambers?—He presents a manuscript note and counsel attend—one counsel generally attends: I do not think the factor could go to the judge except in that way.

2595. Does the judge in such cases require formal, and I might almost call it technical, evidence, or does he exercise his own judgment upon the statement of the judicial factor?—I think he proceeds mainly upon the report of the accountant of court. The note has to be accompanied by a report from the accountant of court, which may be only a single page or maybe a more elaborate paper, if the case be one of difficulty; and then, if the accountant of court brings under his notice that a certain thing is open to some difficulty in law or in discretion, the judge then considers what is brought under his notice.

2596. In general, is an application to the judge for his direction a simple and easy process?—I think it is a simple and inexpensive process. I only remember one case where an order under an application of that kind was appealed against. It related to the allowance to be made to the children of a very wealthy family, and I think the question was, whether 1,500*l.* a year was a sufficient allowance for the maintenance and education of the children. The family were dissatisfied with the sum that the judge allowed, and they appealed.

2597. Is this method of judicial factors an expensive method of administering a trust?—I am not a good authority upon the matter of expense; but my impression is that there is very little difference between the expense of a judicial factory and that of a private trust, because, although the factor is remunerated by a commission, he does a good deal of work for that commission: he collects rents, and conducts correspondence; in fact, it covers everything except proper law business. The factor is entitled to employ a solicitor for completing the title to a mortgage, and, if it be an executory estate, to take his confirmation or probate and make up titles; but the commission does, in fact, cover a good deal which under the system of a private trust would be done by a solicitor, and be charged for by fees.

2598. Is a judicial factory often applied in the case of small trusts of small properties?—I think it is very often. Of course it often happens that people of limited means are unable to get trustees to act for them, and in many of those cases there is either intestacy or perhaps the appointment of an executor who declines to take up the trust.

2599. As I understand, the judicial factor will proceed to prove the will, or to take out the equivalent letters of administration?—Yes, his title to do so is recognised by the court; and, as you are aware, the confirmation obtained in Scotland may be sealed with the Seal of the Court of Probate in England, and *vice versâ*. The Court

*Chairman*—continued.

of Probate recognises the title of the judicial factor, because it is recognised in his own country.

2600. Do the judicial factors also carry on businesses occasionally?—Yes. Of course it would be necessary to have the consent of the factor to that, as well as that of the court, because he runs a certain amount of risk.

2601. In regard to that, according to the Scotch law, assuming that a judicial factor was carrying on a business, would he be responsible personally for the debts incurred?—I have no doubt that he would be responsible, precisely in the same manner as a trustee.

2602. Does any difficulty arise in judicial factors dealing with those cases of discretion which arise under settlements, or wills creating settlements?—The cases in which the judge is applied to are generally where authority is wanted to make up the title to property, or to make advances to beneficiaries; there may be other cases, but I think those are the most frequent. In almost every other matter the factor acts on his own responsibility, but generally after consulting the accountant of court. I see in the paper that I have handed in that the accountant of court says that the factor must bear in mind that he does not undertake responsibility; that, while he is willing to give the benefit of his experience, a judicial factor must remember that he is himself responsible for exercising the trust.

2603. We have been told that there are great apprehensions lest any official should be unable to exercise with proper delicacy and circumspection the discretion that is often required in dealing with trust properties. Do you find that the judicial factor in Scotland gives satisfaction in that respect generally?—I have heard no complaints, and I do not see why a professional man who has found security should not exercise the duties of a trust as well as half-a-dozen men sitting round a solicitor's table. As a matter of fact, I do not think trustees come very much into contact with the objects of their trust when they are at their meetings.

2604. I suppose trust funds are placed wholly in the hands of the judicial factor; that is to say, he could, if he was a rogue, make away with them?—He could not change the investments without first reporting to the accountant of court. He could, of course, make away with the income of the trust when it was paid to him, but he would be found out at the next annual audit.

2605. But the corpus of the fund is not at his disposal?—I do not think he could make away with the corpus, because he would always have to state to the accountant of court what he meant to do with it, what the investment was.

2606. How is it invested; is it invested in his own name, or invested in the name of the accountant of court as well?—The money is invested in the name of the judicial factor.

2607. Have you ever known cases of judicial factors being guilty of defalcations?—Before coming here I inquired of the present accountant of court, Mr. Penney, what had been the experience of the office, and he found that since 1847, during Mr. Moncreiff's tenure of office, and in his own time, during the whole period of 50 years, there had been no loss to beneficiaries. There had been a few cases of the factor becoming insolvent, but the money was always made up by his securities.

2608. So that for 50 years there has not been a single loss to any beneficiary under this system?—No loss. The securities are either friends of the judicial factor, who interpose to help him to carry on his business, or it may be a guarantee company.

2609. In fact, there would be, if it was desired, no difficulty in investing the money in the hands of the accountant of court as well as the judicial factor?—If it were desirable I see no difficulty. It would merely be inserting his name in the title deeds instead of that of the factor. I understand that in some of the evidence that has been given applicable to England it has been indicated that the official trustee who would perform the duty which the accountant of court performs in Scotland would be the proper person to hold the property. I see no objection to that, except that it would give him a good deal of trouble, but would probably at the same time make the trust estate more absolutely safe.

2610. There are, of course, some descriptions of property which might belong to testators or to a trust which involve a liability for shares in banks, as we know too well?—Yes.

2611. What is done in those cases with regard to the judicial factor; does he, or can he, hold that class of security?—I should think he would not; he would most probably transfer the Stock without putting it into his name.

2612. It is practicable, of course, in case of money being left in Bank shares, for example, for an executor, and it would be practicable for the judicial factor, not to have them put in his name at all, but to order them to be sold at once?—Yes, he would sell them without having them transferred into his name in the books of the company.

2613. Has any difficulty arisen in practice with regard to that matter, with regard to that particular class of securities standing in the name of the judicial factor?—Not that I remember. In connection with the City of Glasgow Bank liquidation, where a number of trustees were held responsible for Bank Stock that stood in their names, there were also one or two cases of judicial factors who had held Bank Stock. I suppose those gentlemen had taken over the Stock from a desire to benefit the family, and probably thinking that it was quite safe. I should think that since that time no trustee or factor would be willing to hold Bank Stock.

2614. They can hold freehold or leasehold property?—Yes.

2615. In their own names?—Yes; but more usually the title to the heritable property is made up in the name of the beneficiary or the ward. In the case of minors, the title to heritable property is always taken in the name of the ward.

2616. That is the Scotch equivalent of real property in England?—Yes.

2617. Are there many judicial factories; I suppose

*Chairman*—continued.

suppose there are a large number?—I have here a statement from Mr. Penney on the subject, in which he says, under the head of "Number of factories under supervision," that during the last year there were 1,232 curatories and 626 judicial factories, that is 1,856 altogether. A curatory is the care of the property of minors and insane persons. Then, as regards the funds under supervision, for the same period he gives a detailed statement; and under the head of heritable and other investments, the capital sum is 5,454,000*l.*; and then for heritable property, that is, real estate, he can only give the rental, which is stated at 115,000*l.* a year. Supposing that rental were capitalised at 25 years' purchase, that would give, as the approximate value of the property, 2,875,000*l.*, the aggregate being 8,329,000*l.* Supposing that the wealth of England were taken as 10 times that of Scotland, that might correspond to a sum of 80,000,000*l.* in the larger country, supposing the proportion of estate under supervision to be the same.

2618. Curatories are cases of insane persons or minors?—Yes.

2619. But substantially, I suppose, the curatory of a minor would be the same thing as a judicial factory, would it not?—Yes, I think they are all branches of the same system of administration, but the curatories are generally cases of intestacy.

2620. Now, I suppose, this is in one sense a public trustee; not a public trustee quite; but a system of official trusteeship existing in Scotland?—It is public trust administration, but the responsibility is divided in this way: that the actual conduct of the trust is given to a man of business, and the supervision to a public official.

2621. With a supervision above that by the Lords of Session?—Yes.

2622. Now, supposing that a man wanted to have his property administered in this way by a judicial factor, could he by his will say that he desired a judicial factor to be appointed, and that the will should be administered by the judicial factor?—I have seen a provision of that kind in wills, but not often; I have seen a will stating "I leave my property to" So-and-so "as trustee, and failing him to be managed by a judicial factor appointed by the court."

2623. Supposing that a man were to leave his property simply in this way, "I desire my property to be administered by the judicial factor," would the court comply with his prayer?—I have no doubt they would; I think that would be a very clear case for making the appointment.

2624. There is nothing in the law to prevent that being done?—Nothing whatever.

2625. If on a marriage settlement the relations of the two persons about to married were settling property, and were to express a desire that it should be administered and managed by a judicial factor, I presume the courts would not object to doing that at their request?—I am sure they would not; and marriage contract trusts are sometimes put under a factor, if the trustees have died or declined, just like any other trusts.

2626. I think I have already asked you, but I am not sure (and we attach some importance to it), whether in small properties, little properties



*Chairman*—continued.

of 200*l.*, 300*l.*, and 400*l.*, or up to 2,000*l.*, 3,000*l.*, or 4,000*l.*, there is any reluctance on the part the people of Scotland to have a judical factory by reason of the expense?—I think not. I think that the figures which have been furnished to me show that the average of the estates under judicial management is not very large, not more than a few thousand pounds; and, therefore, it follows that there must be a considerable number of very small ones. I know, from my past experience at the Bar, that very often these factories relate to property of a few hundred pounds, such as may have been accumulated by a successful working man.

2627. Does the court take professional men, mostly accountants, for judicial factors?—Yes.

2628. I suppose that it might be undesirable on other grounds; but, if there would be no objection, the court could, if it thought fit, remit all those matters to one or two men whom they might select as being specially deserving of confidence, I suppose?—We have power to appoint trustees; but, except in the case of charities or trusts for public objects, the power is almost never exercised, because it is thought that the funds of the trust will be better managed by a professional man under official supervision. I may mention that by a recent Act of Parliament any private trust may be put under the supervision of the accountant of court under the same conditions as in the case of a factory. I may also say that occasionally a non-professional person is appointed judicial factor if the beneficiaries apply for it. Sometimes it is done on the statement that he is willing to act gratuitously.

2629. You have all the advantages, it seems to me, of elasticity under the system adopted; the judicial factor can go and see the family and exercise his judgment like anybody else, of course?—Yes, I think he is very much in the same position as a trustee. Perhaps, with reference to the objects which the Committee are inquiring into, the chief value of what I have been able to say on this subject is that it proves the existence of a demand for official administration of trusts, from the fact of this system having grown up in Scotland. As to the proper mode of carrying out the details of the system, those would not necessarily be the same in England as they would be in Scotland.

2630. Does it not also prove that the people of Scotland enjoy the advantage, or part of the advantage, of a public trustee already?—Yes, that is what I meant to convey: that the existence of this system, and it being so largely taken advantage of, shows that where the public can get that kind of trust administration they take advantage of it.

2631. Now, do you know what the establishment costs?—The salaries amount to 5,000*l.* a year. I suppose there will be some other incidental expenses, but the whole charge to the country is very small and, I believe, is entirely covered by fees, or stamps in place of fees.

2632. Do you think that the legal profession in Scotland are satisfied with the existing system?—I think they are quite satisfied with it for the purposes and within the limits to which it is actually applied; and, if companies in Scot-

*Chairman*—continued.

land were to undertake this kind of duty, I should think the profession would say that they ought to be made to report to the accountant of court and otherwise put in the same position as a private judicial factor.

2633. Do you think that companies could successfully, in Scotland, compete with the system of judicial factory?—I am not aware whether the existing companies have been successful or not, but I see no reason why a corporation should not undertake the duties under the same conditions.

2634. Are there any respects in which you think that there could be amendment or improvement (I do not know whether it requires any particular improvement) of the system of judicial factory?—I do not myself see that there is anything to be gained by substituting a company for a judicial factor. And then on the question of a public trustee I think the fact that we have a system in existence in Scotland which answers well would probably be a reason why many would think that such a change was not necessary.

2635. I will now ask you upon another matter, if you please, that is, about the auditing of trust accounts where there is no judicial factory. Is it very usual now in Scotland to have trust accounts annually audited?—It is a practice very much on the increase. I know that in several trusts in which I am a trustee we have the accounts annually audited; and I hear from friends that they have the same experience, and that, very generally, the solicitor himself proposes it; but I should think it was a desirable thing, if possible, that audit should be made obligatory; and especially for the reason that I think was given by a gentleman who has been examined before the Committee, namely, that no trustee when he enters upon his duties ever means to be dishonest. The cases of dishonesty are where a trustee is under pressure of pecuniary difficulties, and is tempted to make use of the trust fund. Now, if he were subjected to an annual audit he would not be likely to do so, because he would know that he would immediately be found out.

Sir *George Osborne Morgan.*

2636. I think you said that in Scotland there was no such thing as payment into court of trust funds?—No; only when it is stated that the funds are in danger, and then it is done as a precautionary measure.

2637. There is nothing like our distringas in England, a stop order, is there?—I cannot think of any such process. Perhaps Sir Charles Pearson can suggest something.

Sir *Charles Pearson.*

2638. Would not the nearest analogy be our interim interdict, which can be obtained in a very few hours?—Yes.

Sir *George Osborne Morgan.*

2639. What we should call an injunction?—Yes, the analogue to an injunction.

2640. This judicial factor, though nominated by the court, is not, of course, an official personage in the way that the public trustee proposed by my honourable friend's Bill would be?—No.

Sir *George Osborne Morgan*—continued.

2641. He might be a friend merely, might he not?—Yes, he might be.

2642. Or a member of the family?—Yes, and then there is the distinction that each appointment is a separate appointment to that particular trust; he has no general appointment or general duties.

2643. I suppose he is generally nominated by the family or the beneficiaries?—Yes.

2644. Or in the case of a minor, I suppose the court looks into the circumstances of the case and would appoint the most proper man?—I think that the nearest relatives or the solicitor who has charge of the family affairs makes the suggestion.

2645. Then, did I rightly understand you to say, that the capital funds are invested in his name, and that he cannot deal with the corpus without the sanction of the court?—He cannot make up a title to real estate without an order from a judge. He can make up a title to personalty without an order, but he has to report what he has done to the accountant of court.

2646. But I suppose there would be cases, for instance, in the case of a sale or the realisation of property, in which at any rate for a short time the whole capital would be practically under his control?—I think that would be so; that when property is sold, and before it is reinvested, it might be under his control; but of course his duty is to see that the money is paid into a separate account in the name of the trust.

2647. But supposing he was a dishonest man, I suppose it would be possible for a judicial factor to make away with, or to abscond with, the funds, if he had them in his hands a short time?—I think it is perfectly possible that a judicial factor receiving the price of property might draw a cheque and leave the country with the funds.

2648. To the credit of Scotland, I am happy to say that such a case has never occurred?—The only losses, I believe, have been losses of income arising from bankruptcy.

2649. Does the judicial factor ever carry on a business such as a manufacturing or trading business?—I think this is not often done, because it is obviously more advantageous to have the business carried on by trustees, and very often the testator's sons are trustees and partners. But I know that power has been given to a judicial factor to carry on a business.

2650. How is the judicial factor remunerated; I did not quite catch what you said?—He is remunerated by a commission, and the commission is fixed by the accountant of court. A rather larger commission is given for small estates than for larger ones; I think it ranges from 1 to 3 per cent. upon the annual transactions in the income.

2651. Of course the remuneration goes into his own pocket?—Yes.

2652. You spoke of an establishment which you said cost 5,000*l.* a year; what does that establishment consist of?—I do not think I can give the Committee that information; there is one responsible officer, and then he has clerks to assist him in the audit and correspondence.

2653. I suppose you have read the Bill of my honourable

Sir *George Osborne Morgan*—continued.

honourable friends that has been brought in for the appointment of a public trustee?—I have not read it; I have glanced at it, and I know the scope of it.

2654. Might I ask you whether you think that a system, which seems to have worked exceedingly well in Scotland, would be preferable if applied in this country to appointing a public trustee, as proposed by the Bill; have you formed any opinion upon that point?—If I may answer your question in this way: it seems to me that it would be very difficult to find an official person who would have the knowledge and be able to give the time necessary to a very large number of trusts. On that ground it seems to me better to divide the duties of trusteeship amongst different professional men, putting them under supervision.

2655. There is nothing, so far as I gather from you, in the different circumstances of England and Scotland which would prevent the system which has worked so well in Scotland from working equally well in England?—I think the system is entirely independent of any differences in the institutions of England and Scotland, and, as you know, the principles of trust law are the same throughout the United Kingdom.

Dr. *Farquharson.*

2656. Do you think that there is much disinclination in Scotland on the part of private people to take up the duties of trusteeship?—I think there are many instances where trustees decline; but it is an unusual thing to find that the whole of the trustees nominated by a truster have declined; you generally get two or three who are willing to act.

2657. But it would seem, would it not, that in Scotland both the work and the responsibility of a trustee are very much minimised; for instance, you told us that a trustee in Scotland usually acts in conjunction with the solicitor?—Yes; trustees in Scotland, and I suppose in England also, are not bound to perform work in person which can be done by a professional man; and, therefore, they are entitled to employ a solicitor for the law business and the clerical business of the trust.

2658. Then the solicitor does all the work, and the private trustee is really relieved practically of that part of the onerous duty?—I think that the duties of trustees, in my experience, are confined to attending the meetings and considering what is placed before them, when they give their opinion very much as a board of directors do when the matters of the company are brought before them by the manager.

2659. Then how far is the sleeping partner, if you may call him so, in a trust made responsible for the actions of the solicitor who is doing the work?—If he sanctioned an improper investment he could not avoid responsibility by throwing the blame on the solicitor. The solicitor would be responsible to him, for instance, if the title of a security were defective, but, as regards the sufficiency of the investment, trustees must judge for themselves. They are entitled to be protected by the opinion of a valuator of property; and I forget whether I mentioned that by a recent Act of Parliament if trustees lend upon



Dr. *Farquharson*—continued.

the report of a competent valuator to the extent of two-thirds of the value of the property, they are indemnified by the Act of Parliament.

2660. I suppose a non-legal member of a trust would have to satisfy himself that the legal member had really invested the funds entrusted to him and not retained them for his own purposes or used them in some other way?—Yes; I think the bonds or securities, whatever they are, would always be exhibited to the trustees to show them that the money had been invested.

2661. I think you told us that one of those cases in the House of Lords was a case of legal process on account of the depreciation of funds. Is a trustee held responsible in a case of that kind if funds are depreciated by accidental circumstances over which he has no control?—No, he would not be responsible if it was the result of mere depreciation. The cases I referred to (and there were a considerable number of them) were cases where trustees had invested in second securities and had lent up to the full value of the property, and then when the property declined in value there arose a loss, for which they were made responsible.

2662. And, as I understand, anyone in Scotland is entitled if he pleases to avail himself of the services of a judicial factor, to have a judicial factor appointed, that is to say?—Do you mean a trustee or a beneficiary?

2663. Supposing I were going to be married, which is not perhaps a very probable case, and I could not find trustees in my own circle of friends, could I go to court and say: "Will you appoint a judicial factor to look after my trust"?—That would be perfectly competent. Supposing the settlement set forth the terms of the trust, and reserved power to appoint trustees (which would be the competent way of doing it), and no appointment was made, you might then apply to the court for a judicial factory.

2664. So that, as the honourable and learned Chairman put it just now, you have actually established in Scotland, and have at the present time in full working order, a process of official trusteeship?—I so regard it. The appointment of the receiver in England, as I understand, is only a temporary appointment; but the judicial factor (although his appointment is always liable to be recalled), if he does his duty, expects to continue in office until the trust is wound up.

2665. Then he acts under the authority of the court. Is there any particular department of the court that presides over his functions; I mean with regard to the 5,000*l.* a year which you spoke of as being paid to some particular department; is that the department which presides over the functions of judicial factory?—That is the cost of salaries paid in the Accountant of Court's department.

*Chairman.*

2666. Have they other work to do besides?—They have also bankruptcy work. The Accountant of Court supervises trustees in bankruptcy.

2667. So that in point of fact this 5,000*l.* a year is not wholly spent in judicial factory or supervising it, but it also covers a variety of other work?—The note from which I have already

*Chairman*—continued.

quoted states that the expenditure on salaries last year, exclusive of the bankruptcy department, was 3,144*l.*; so I suppose that the difference between that and the 5,000*l.* belongs to the bankruptcy department.

Dr. *Farquharson.*

2668. Then the court holds jurisdiction over the judicial factor, but does not have any responsibility for his pecuniary functions; that is to say, the court is not held in any way responsible for the corpus?—No; nor is the accountant of court; he is merely a public official, and if there be any breach of trust, or improper investment, the factor is responsible.

2669. You said something about securities; is the judicial factor obliged to find securities up to the full amount of the sum over which he has jurisdiction?—Yes. I am not conversant with the form of the bond; but I know that he has to produce a bond, signed by two sufficient securities, for his intromissions.

Sir *Charles Pearson.*

2670. Is it within your experience that there is in Scotland any serious difficulty in finding private trustees who will accept and act?—I should think not; but my experience is very limited on that subject.

2671. At any rate, any difficulty that might exist on that head is, in your opinion, obviated by the system of judicial factories which you have described?—I think so; that failing trustees, there is no difficulty in finding a professional accountant of good standing willing to undertake the administration in the capacity of judicial factor.

2672. I think you said that, although professional accountants were the most common form of appointment as judicial factors, they need not even be professional men, if the circumstances seem better suited to the appointment of a friend of the family who is not a professional man?—Yes, that would happen in a case where there was an entire failure of trustees, and, therefore, no one in a position to appoint a new trustee; then a friend of the family might be appointed judicial factor.

2673. I do not know whether the Committee have before them fully the circumstances in which judicial factors are appointed. May I take it that the main classes of judicial factors are those appointed to persons in pupilarity, to persons in minority, to persons who are mentally incapable of managing their affairs, including lunatics, to persons who are absent from Scotland, and whose whereabouts is unknown, and also on lapsed trusts and upon partnership estates?—Yes, I think those are the different classes of appointment.

2674. And in the case of partnership estates I think the appointment is usually for the purpose of liquidation or winding up, but not necessarily so?—I think appointments on partnership estates are very rare. If there be an irreconcilable difference between partners, the court is sometimes applied to to appoint a factor; but those appointments have been very much discouraged.

2675. There is, I believe, no list of persons, either willing to accept the office of judicial factor, or selected by the court or anyone else for appointment as judicial factor; the choice is perfectly free among professional and other men?—The choice is quite free. I suppose the junior judge has a list of persons that he would appoint in case of the parties who apply to him not being agreed as to the selection.

Sir *Charles Pearson*—continued.

2676. After finding security, is the first act of the judicial factor to lodge his inventory, which must be done within six months?—Yes.

2677. That is an inventory of the whole estate falling under the factory?—Yes.

2678. And that inventory forms the basis of the charge side of his annual accounts which are lodged for audit?—Yes.

2679. So that the annual accounts include capital as well as revenue?—I understand that the capital account is continued from year to year; but kept separate, of course, from the income account.

2680. But both the one and the other are submitted for audit annually?—Yes.

2681. The accounts are audited by the accountant of court?—Yes, and of course he requires the production of vouchers; and if at the same time he notices any irregularity in regard to investments, although that is not strictly a matter of audit, he calls attention to it.

2682. Has that audit been, in your judgment, thoroughly effective throughout the whole time during which the office has lasted?—I have every reason to believe that it has been effective.

2683. We have had testimony before us as to the unsatisfactory character of all audits, public or private; this, at any rate, is an instance of an audit being, so far as experience goes, satisfactory for its purposes?—In the case of private trusts, if public opinion would allow of it, I think it would be a very desirable thing to put the audit of all trusts under the accountant of court; but, as probably there might be objection to that on the part of the trustees, I should like to see a clause in an Act of Parliament requiring that all trust accounts should be annually audited by some independent accountant of the trustees' selection.

2684. If that were required by the Legislature it would get rid of the difficulty that often arises from feelings of delicacy of beneficiaries insisting upon such audit?—Yes.

2685. That, I presume, is one of the reasons why such audit is not always insisted upon?—I should say that in Scotland the body of writers or solicitors would not in any way resent the request for an audit, it is so common; but I think it is very likely that many beneficiaries are not aware that it is a common thing. I may mention that in speaking on this subject to a member of the Bar, who is also sheriff of a county, I spoke of audit, and he said that he was a trustee on two or three trusts, and there never had been an audit of any of the trusts with which he was connected.

*Chairman.*

2686. Is there not some provision in the Scotch law under which certain classes of trustees are obliged to have their accounts audited; I have been so informed, and have so acted upon it as a trustee?—In what kinds of trusts, Mr. Attorney?

2687. It

*Chairman*—continued.

2687. It was the case of a trust for infants, which involved the taking out of letters of confirmation in respect of a previous death; I had to act and take out letters of confirmation, I think it is called?—Yes.

2688. And I was told by my agent that I had to give some account, which I did; but perhaps that was only because he thought it right; it may not have been required by law?—I am not aware of any statutory provision requiring an audit, except in the case of trustees in bankruptcy and judicial factors; but as I mentioned in my first evidence, it is very common in practice to have it done.

Sir *Charles Pearson.*

2689. And it is also not infrequent in trust deeds of an important character to enjoin a yearly audit upon the trustees, and order them to send in their accounts to an accountant yearly; is not that so?—I have seen testamentary deeds in which there was such a provision, namely, that the trustees were desired to have annual audits of their accounts.

2690. You have spoken chiefly of judicial factors who were appointed by the supreme court; you are aware, of course, that in 1880 an Act was passed for the appointment of judicial factors in the Sheriff Courts in Scotland, that is the local courts, in estates not exceeding 100*l.* in annual value?—Yes, that was passed at the time I was in Parliament, and I thought it a very useful extension of a good system, because the appointments to small estates can be made a little more cheaply in the Sheriff's Courts. They are all under the Accountant of Court of Session. The accounts have to be transmitted to Edinburgh to him.

2691. And that has since been amended and extended by the Act of 1889, to which you have alluded?—Yes.

2692. Are you able to inform us of the extent to which Section 18 of the Act of 1889 has been taken advantage of, which enables testamentary trustees to apply to the court for a superintendence order?—If I may answer the question by reading from the memorandum that was sent me by the Accountant of Court, he says: "By the 1889 Act, trustees can get an order of court, placing their accounts and their investments under the accountant's supervision. Up to date this has been very little taken advantage of, owing largely, no doubt, to ignorance of the provision, and of the necessary procedure. There is also an idea that trustees would be hampered in their proceedings by official supervision, and that the proceedings would be too costly. When these prejudices have been overcome (and the accountant believes that is a mere question of time), he is of opinion that this provision will be very largely taken advantage of."

2693. Do you concur in that view?—I think that one reason why this section has not been availed of more widely is, that it was in substitution for a clause in a previous Act, which related only to insolvent estates; and the public have the idea that the taint of insolvency would attach to an application under this clause, although really the clause is not at all confined to insolvent trusts.

Sir *Henry Roscoe.*

2694. Do I rightly understand that the official factors find security, or are they obliged to do so, to the total amount of the corpus?—I believe that they find security for their intromissions, and that would apply in dealing with the corpus as well as with the income.

2695. Supposing, for example, that a man has under his charge property, say, in personalty amounting to 100,000*l.*, has he to find security for that total of 100,000*l.*?—If he made away with any part of the capital the security would be liable.

2696. But does his security amount to the total value of the capital?—I am hardly able to say how that is determined.

Sir *Charles Pearson.*

2697. Your Lordship will find that in the Act of 1849?—Thank you. The 27th section of the first Act, I find, provides that "the caution" (as we term it), that is the security, to be found by factors and tutors and curators may be limited "to a specified amount," and the court may also "authorise, if they shall deem it expedient, bonds or policies of the British Guarantee Association or other public company incorporated by Act of Parliament or Royal Charter carrying on guarantee business within Scotland, to be accepted and taken instead of bonds of caution by p vate individuals." But my impression is that in general terms, although the power to limit exists, it is not usually exercised, and that the securities are just bound to be responsible for the action of the factor, and that they would be responsible for any loss, to whatever extent their security was worth.

Sir *Henry Roscoe.*

2698. But the security might under certain circumstances not be worth the property that the factor might make away with possibly?—Of course it might be so.

2699. You have been very fortunate, it seems, in Scotland in that respect; but supposing the application of a similar system to England, where the property is ten-fold, as you tell us, the risk might no doubt be very much greater; would it be possible in your opinion to place the Government security at the back of what you call the judicial factors in Scotland?—Do you mean that the Government should be responsible for any loss that the securities could not pay.

2700. Yes?—That is a point that I have not much considered; but in connection with the question of public trusteeship, it does seem to me to be a serious difficulty that the public exchequer would necessarily be responsible if you had an official trustee, and it seems rather an anomaly to have an action brought against a public department for negligent administration. I should not think it necessary that there should be any guarantee by the State under an extension of the system existing in Scotland; but it might be necessary under the system that was supposed in the Bill introduced by Colonel Howard Vincent.

2701. Do you mean that if the system, or a similar system, such as you have described to us

Sir *Henry Roscoe*—continued.

in Scotland, were introduced into England, you do not think that it would be necessary to give a State guarantee; or do you mean that in Scotland merely you do not see the necessity for it?—I think the experience that has been had in Scotland during the past 50 years shows that a State guarantee is unnecessary, and that experience would be applicable to any proposed extension of the system to England or Ireland.

2702. You think that an extension to the degree, as you tell us, of ten times the amount would not necessarily bring about a risk which you do not feel at present in Scotland?—No; because I think that in the case of large estates no one but a man of the highest professional position would ever be appointed; and then there must be some trust in the character of the person.

2703. But is not the very object of the proposal of a public trustee to avoid any chance that there may be of even the most apparently respectable man, through one cause or another, yielding to the pressure of circumstances, and taking some portion of the funds?—I think the security found would always be amply sufficient to guarantee any loss of income that might result through the bankruptcy of a judicial factor or his firm. And then there could be no loss of capital, of course, except through deliberate fraud; and I think you must look to character as the protection against such loss.

2704. Do you think that character is a sufficient guarantee against fraud?—Along with official supervision. If you find a person in good credit, and with a large and prosperous business undertaking an office of this kind, and if he knows that at the end of six months his accounts will be audited, one can hardly contemplate that he would make away with the money.

2705. We have heard from a number of witnesses already that there are very serious defalcations, and I cannot myself quite see how the prospect of a six months' audit in the future would prevent a man, from some circumstance or another, yielding to the temptation of making away with the corpus, which I understand he can do under your system?—Well that, of course, is a matter of opinion. There is partial protection through the requirement of finding security, which has hitherto been found sufficient; and my opinion is entirely founded on past experience. But I ought, perhaps, to add (I do not know whether this is really within the scope of my examination) that on principle I should strongly object to the State undertaking responsibility for private trusts; because every individual has to entrust some portion of his affairs to the management of others. If a landed proprietor, for instance, employs a factor or steward to collect his rents, and to account to him, nobody thinks that the State ought to guarantee him against loss through the fraud of his steward; and I do not see any distinction in principle between that case and the case of beneficiaries defrauded by trustees.

Mr. *Greene.*

2706. Will you kindly tell the Committee whether one man may hold an unlimited number of factories?—There is no restriction as regards the number.

Mr. *Greene*—continued.

2707. Then, if he has to give security, does he have to give a different security in the case of each factory that he holds?—He has to give in a separate bond, signed by two sureties.

2708. Two different sureties?—I do not know whether they have all to be different in each case. I think it is very likely that the same men subscribe in more than one factory.

2709. Then, in point of fact, you may have a factor intrusted with property to the value of 100,000*l.*, whose bondsmen might only be sureties to the extent of 2,000*l.*?—If that is the case, that would be a blot on the system. I think the security of guarantee associations has been very largely taken advantage of, because many men prefer to pay a small premium rather than ask their friends to be responsible for them.

2710. If the judicial factor is, so to speak, what we should call here an officer of the court, is he liable to be dealt with summarily by the court and punished for neglect of his duty, or breaches of his duty by the court itself, or is there any criminal code for dealing with him?—He would in those respects, I think, be substantially in the position of a trustee; only that if there were any breach of trust he would be more speedily found out, and if a factor were found to have committed a breach of trust, his appointment would immediately be cancelled.

2711. In England every solicitor is what we call an officer of the court, and if he misbehaves himself in any professional matter, he may be struck off the Rolls and cease to have the qualification to practice; that is one summary way of dealing with him; again, he may be ordered to pay very large sums in costs brought about by carelessness that he has involved his clients in. I wanted to know whether the judicial factor is so under the grasp of the court that they could punish him in some way or other for his misdeeds if he defalcated or neglected to work the trust properly?—He is an officer of court as judicial factor, but not as an accountant. I do not think the court would have the power of striking him off the roll of chartered accountants, as they would do in the case of a solicitor.

2712. Is there any section of the criminal law in Scotland applicable especially to defalcations or misfeasances, or crimes of judicial factors?—There is no statutory code on the subject, but that comes under the common law, that every wilful breach of trust would be punishable criminally. We have had cases, some of which are reported, of directors of public companies who have been tried and sentenced for breaches of trust.

2713. Under the Companies Act, I take it that that would be the practice?—Also under the common law of Scotland; that was so in the case of the directors of the City of Glasgow Bank.

2714. Has the judicial factor any power, derived from being an officer of court, to summon to his assistance any persons who have knowledge of the affairs of the trust, so that he can get complete discovery of the affairs which he has to administer?—No, he has no compulsory powers; he

Mr. *Greene*—continued.

he would, just as a trustee would do, write or ask for an interview upon the affairs of the trust when necessary. I may say, too, that in dealing with the distribution of funds amongst the persons entitled, he would act upon informal evidence of deaths, marriages, and births just as a trustee would do.

2715. But he has no power to ferret out or compel disclosures, so that in the case of administering a will, if he were acting for executors he could not take possession forcibly of the papers of the deceased, or interrogate under the sanction of an oath any persons who had been about the deceased and whose information was necessary to enable him to get possession of the testator's effects?—He would have all the powers of an executor and administrator, and no more, in regard to information wanted for distribution. If there was a doubt as to who was entitled, he would bring a distribution suit, like an executor or trustee.

2716. With regard to the judicial factor's qualifications, is there any regular qualification or any rule for fixing upon the attainments or qualifications of a factor?—The court have no rule, he is a member of the Society of Chartered Accountants; and sometimes solicitors are appointed, but not often. I think the court hold that the appointment is quite open.

2717. Then are they scattered all over Scotland?—Until 1880 the appointments had all to be made in the Court of Session, but since then the Sheriff's Court have had the power of making appointments to estates of a certain value. I think that the main reason for giving the power of appointment to sheriffs of counties was that professional persons in any part of Scotland might be appointed. Of course, as long as the appointments lay with the Supreme Court, there was a tendency to attract the business towards the Edinburgh branch of the profession.

2718. You told us, which was very interesting and new to us here, that, in the case of an infant, the judicial factor does not take his legal estate as trustee for the infant, but the infant gets the legal estate direct?—Yes, the title is taken in the name of the infant, or of the lunatic, if it be an insane person.

2719. Has the judicial factor, in reference to real estate, power of disposing of it?—No; neither in the case of guardianship, nor of trust, can he dispose of the real estate without the authority of the court; he has to present an application. One reason for that rule is, that under wills and trusts it is sometimes not intended that the real estate should be sold, but that it should go to the eldest son, or be divided in a certain way. Therefore a sale is considered an extraordinary act of administration, which a judicial factor should not exercise without the leave of the judge.

2720. Is conversion uncommon. We have a considerable amount of real and personal estate here with trusts for reverting the real into personal?—That, of course, is equally common in Scotland, and I confess I see no reason, where there is a power of sale and a direction to divide the mixed heritable and moveable estate, why the factor should not exercise that power without leave; but, as you ask me about the existing state of the law, the rule is that he cannot sell landed estate without a judge's order.

Mr. *Greene*—continued.

2721. And does a judge's order, when he gives it, provide who shall be the recipient or handler of the proceeds?—I think it is always for distribution.

2722. But it is his hand that has to take the money?—Yes; the ordinary course of practice would be that when the property was sold the price would be paid into a bank account, opened in the name of the trust; and then the factor would draw upon that for sums that were to be shared amongst the beneficiaries.

2723. Then, as was pointed out just now, having got the money he could very easily misapply it?—Yes; even supposing it were paid directly into the bank account by the purchaser, the factor could draw it all out next day.

2724. Unless there was a second name into which it had to be put with his own, a second trustee?—Yes. Your question points to some check in regard to the transactions with capital which probably would be desirable as an additional security to those that already exist.

*Chairman.*

2725. May I ask you one question on one point. My honourable friend on the right asked you if it was not the case that the corpus of the trust funds was under the control, for a certain time, of the judicial factor, so that he could make away with it if he was dishonest. It would not interfere with the system, would it, if a provision was made that the corpus should be vested, say in the Paymaster-General or any other public servant, and only the income be under the control of the judicial factor?—It would not; and I think it would be an improvement in the system if, in dealing with the corpus, the signature of some public official should be required.

2726. The fact is, is it not, that in Scotland for 50 years there has been absolutely no loss to the beneficiaries by a judicial factor?—That is so; and I may say that I believe that there were considerable losses prior to 1849, when there was no public department of supervision.

2727. Since there has been a public department of supervision there has been no loss, and therefore no occasion to provide otherwise with regard to the corpus than the law now provides?—Yes. If the signature of the accountant of court, or the public paymaster, were required to drafts upon the capital account, it might be provided that that should not in any way involve responsibility on his part for due administration, but that his signature is there to show that the fund is being paid over to the beneficiaries for whom it is intended.

*Monday*, 1*st April* 1895.

MEMBERS PRESENT:

Mr. Attorney General.
Mr. H. D. Greene.
Sir George Osborne Morgan.
Sir Henry Roscoe.
Colonel Howard Vincent.

MR. ATTORNEY GENERAL, IN THE CHAIR.

His Honour Judge CHALMERS; Examined.

*Chairman.*

2728. YOU are, as we all know, County Court Judge at Birmingham?—Yes.

2729. And I believe you also had experience for a short period as Acting Chief Justice at Gibraltar?—Yes; 6 months.

2730. As we know, the County Courts have jurisdiction in regard to administration of small intestacy suits?—Yes.

2731. In the first place, I would ask you what you think about the liability under the existing law of trustees; do you think it is too severe, or do you think it cannot be relaxed safely?—I think it is very much too severe. A trustee is a gratuitous bailee, and as long as he acts honestly and reasonably he ought to be protected. There is, as you know, a historical origin for the severity of the rules that have grown up; trusts having been administered by the Court of Chancery, the Chancery Judges must lay down hard-and-fast rules. If the liability of trustees had been dealt with at Common Law, a Judge might have laid down what rules he liked, but a jury would always have protected a man who was acting honestly and fairly.

2732. In Chancery there is a rhadamanthine rule, and Rhadamanthus himself administers it?—Yes. A judge's decision, of course, is always a precedent, and therefore he cannot relax the rules. In common law the Judge lays down the strict law, and the rule is not broken into; but the juries find the facts which prevents the law, very often, from acting too harshly.

2733. In fact, in common law the juries very often make the law, instead of the rules making the law?—Yes, very often, and very properly.

Sir *George Osborne Morgan.*

2734. Hard cases do not make bad law, in fact?—Exactly.

*Chairman.*

2735. Do you think the law ought to be now that whenever a trustee has acted with reasonable diligence, and in complete honesty, and with reasonable prudence, he ought to be absolved from personal liability?—Yes. I should apply to him exactly the same standard as to any other gratuitous bailee. If a man undertakes a gratuitous bailment, although his services are rendered gratuitously, he undertakes to bring honesty and reasonable skill to bear upon the work he does.

*Chairman*—continued.

2736. I should like to ask you about your experience in regard to trust, which must have been very extensive in Birmingham, I suppose?—Not very extensive. I may say that in small cases, so far as I can, I discourage administration suits, because I find that the costs eat up nearly the whole estate. I asked the registrar to look out the last case for me, which I find was a case of a small estate, an intestate estate, of 225*l.* The taxed costs, which are quite different, as you know, from the actual costs paid by the parties, were 94*l.*

2737. What do you suppose the cost is due to; is it due to the fact that solicitors are employed on both sides?—Yes, and they must be employed; the parties could not do it without employing them. And in small matters everything is irregular, and everything requires to be found out. It is not the fault of the solicitors by any means. In this case the solicitors on both sides were respectable people doing their work as cheaply as they could. But you find everything is irregular. You find, for instance, that where there is an intestacy, the members of the family do not know where the other members are; some are abroad, and very often they go abroad in other names. The poor are very casual about names; a man very often has two or three names, and it is hard to test their legitimacy; and therefore the inquiries are necessarily expensive. I should like to see small administrations put into the hands of an official with very large summary powers, just as the small bankruptcies under 300*l.* are dealt with by the Official Receiver.

2738. As you have mentioned that, I should like to ask you, how do you find the administration by the Official Receiver of small bankruptcies in the County Court acts?—I find that it acts very well in my Court. I have a very good Official Receiver, who is very competent and very industrious, and I find it acts exceedingly well.

2739. He is an officer of the Court, is he not?—

*Chairman*—continued.

not?—Yes, he is an officer of the Court, and he is an officer of the Board of Trade.

2740. Do you find that there is much money spent in the winding-up of a small bankruptcy under 300*l.*?—Hardly any in litigation. There are certain necessary expenses relating to the conduct of the bankrupt, for public reasons; but in litigation hardly any.

2741. And in the administration itself, there is very little, I suppose?—Very little, except, of course, the Board of Trade fees, which are so arranged as to pay for all the inquiries, and everything else; otherwise there is very little.

2742. And if you could dispense with the Board of Trade inquiries, which would be the case in the administration of trusts, or in small administrations, do you think that that would lessen the expense?—I think it might be done very cheaply.

2743. We have had some very interesting evidence from Lord M'Laren about the judicial factories as they call them in Scotland; that is a system, in a sentence, by which, under the direction of the Court, a person approved by the Court and generally recommended by the family is constituted the manager of the whole thing. Do you think it would be possible to apply any system of that kind to this country?—To a small trust or a large one do you mean?

2744. In the first instance, to a small trust?—I think it might. It would be what we should call, I suppose, a receiver and manager of the trust.

2745. Yes?—I think it might be done.

2746. Supposing that you were authorised to direct either your own Official Receiver or such person as you thought proper to take out probate, and with power to come and apply to yourself to divide the estate, a small estate, according to the interests of those entitled, would you have any difficulty in working that out?—No, I think not. Of course, in all these small matters, you have exceedingly great legal complications, and I think it would be necessary to give the Court power to enforce compromises on people and to deal summarily with them; but as regards the general management by an officer so appointed, I do not think there would be any difficulty.

2747. I will give you an illustration. On looking through the accounts of a Scotch court I find an illustration that comes very much home to me. It is the case of a small sum of money, a corpus of about 4,000*l.* left to minors, which brings in an income of about 200*l.* a year, the distribution of which seems to be entrusted to a member of the family, audited every year in the Court of Session; and the cost is between 20*s.* and 40*s.* every year. Would there be any difficulty, if you had an accountant responsible to yourself, whose duty it should be to take accounts of trusts, in doing the same thing in England.

2748. Yes?—No, I do not think there would be any difficulty about it; but I think that the management of a trust ought to be in the hands of a solicitor. I think that probate ought to be taken out; and all legal steps ought to be taken by a solicitor.

*Chairman*—continued.

2749. Would you say why?—It always may develop into Court work, and therefore ought to be in the hands of a person who would eventually carry it on in Court. Solicitors do accountants' work, as a matter of fact, and intestacy work is more within their province than within the province of an accountant. I think an accountant's function ought to be kept to mere audit.

2750. In these small estates the object that one naturally has in view, of course, is not to incur costs?—Yes.

2751. And most of us, I imagine, would want, if possible, to minimise the costs, and give a small commission, say, from 1 to 3 per cent. of the annual income?—I do not think there would be any difficulty in arranging that with a respectable solicitor, because this kind of work would bring him other work. I would not have an official for that sort of thing; I would have a nominated list of solicitors. You have much more control over solicitors. The Incorporated Law Society exercises a very strict discipline and control; and I think that if the Law Society in each place were allowed to nominate solicitors who would carry out the functions that you indicate, you would have an efficient control over the persons who would act.

2752. Do you think that by reason of there being a large amount, of course, of business of this kind, partly administering trusts from year to year, partly taking out probate, and partly taking ont letters of administration; that being so, if the parties thought that they could get this work done under the control and protection of the Court for a very small sum of money, there would be a vast amount of it?—I think there might be.

2753. And accordingly solicitors would be willing to do the work, as it would become more or less routine work, for a small sum?—That is my notion; but you could easily find that out from the Council of the Incorporated Law Society. I certainly would leave the responsibility of appointment to them.

2754. I am afraid we should not have much encouragement in that direction from the Incorporated Law Society?—No; because they are bitterly hostile to a public trustee; in fact, the hostility is, I think, so great that I doubt whether any scheme of a public trustee would be allowed to work. And it is a perfectly honest opposition to a public trustee.

2755. You think that the Statute would have to be very stringent and drastic in order to be effective?—Yes; and besides that, clients are advised by their solicitors; and you may bring a horse to the water but you cannot make him drink.

2756. *Vigilantibus non dormientibus leges subserviunt*?—Yes.

2757. But, at all events, you think that if you were empowered to deal with small estates by the medium, at your own option, for example of your own Official Receiver, or of persons outside who shall be appointed for that particular estate, you could effect the administration and distribution of estates quite cheaply?—I think it might be done cheaply; but there are several difficulties that I should like to point out as to the

*Chairman*—continued.

the Official Receiver being appointed. In the first place, the Official Receiver in a big town is overworked; you could not expect him to do it. Also as regards the County Court itself, there are these two difficulties. In the case of a country County Court, in the country districts the Judge has probably from 10 to 15 towns in his circuit at a distance from each other, and therefore his attendance at any particular town is only on fixed days at long intervals, and the trust businesses, these small trust businesses, would be hung up. And in a big town where the Judge is sitting constantly, they have always too much to do already. I do not know whether you would like the figures for Birmingham, for instance?

2758. If you please, Birmingham for instance?—Last year there were over 52,000 ordinary cases; there were 6,000 judgment summonses; there were some hundred interpleaders; there were the High Court remitted issues to be tried; and the whole bankruptcy of the district and the winding-up cases under 10,000*l*. The two registrars and myself, with a few days from Sir Richard Harington, had to make over 100,000 orders. That does not leave one much time to go into Trusts in the way one would like.

2759. That leaves 500 orders per day if you sat 200 days in the year?—Yes.

2760. Most of them are rather formal, I suppose?—Yes, many of them; the large bulk of cases are undefended.

2761. But still requiring to be watched?—Yes.

2762. But yours, I think, is about the busiest county court in England, is it not?—Yes, I suppose it is; but still, more or less, that applies to all big towns.

2763. It might be necessary, and, in fact, from what you say, it obviously would be in your case, and in the case of some others, to give you some further assistance if that work had to be done?—Yes.

2764. But I suppose it would be preferable to give such assistance in the form of an additional registrar?—Yes.

2765. Rather than an additional county court judge?—Yes; the expense is the same, of course.

2766. But, at all events, you think it would be practicable if you had a sufficient judicial force to carry out such a project as I have indicated?—Yes, with the aid of a specially appointed officer such as you have indicated. I am certain of this: that the court is a very bad administrative machine if the administration is conducted on the lines of an ordinary suit, because the court has no initiative; and you have to wait to be moved, and you have to be moved on sufficient and proper evidence. When I was at Gibraltar I found some heavy trust matters which had been lagging on for years, and I tried in vain to wind them up. I found I had absolutely no power of hastening the parties and bringing matters to a conclusion.

2767. You see that, in the system that Lord M'Laren spoke of, the initiative is entrusted to the judicial factor?—Yes.

2768. He may decide for himself on his own responsibility, and if he liked, I suppose, he might come to the Court?—Yes.

2769. If that were done in England, do you think it would make things easier?—I think it would. That is somewhat on the lines of a scheme that I suggested to the Treasury some time ago, but I would have the factors, of course, local solicitors who are in touch with the local circumstances and have local knowledge.

2770. You would go to some one outside the Court and tell him, "Your business is to wind up this estate"?—Yes.

2771. "And if you want directions or assistance you may come to me?"—Yes.

2772. But otherwise you have nothing to do but to direct your accounts to be audited, and to obtain the Judges's approval of your conduct, if necessary?—Yes, I think you might have local administration and central audit and control. That is the principle I should like to see applied. I think, if I may say so, it is very important that the persons who are to hold an office such as you have described should be nominated, or at any rate a list of them furnished by the Incorporated Law Society who are ultimately responsible for their discipline and good behaviour. I think they could furnish a list in each Court of proper persons, and then you could deal out the cases according to the necessities of the case.

2773. Leaving an absolute choice to the county court judge to depart from it if he thinks proper?—Certainly.

2774. Sometimes, indeed often, according to Lord M'Laren's evidence, the judicial factor is nominated by the family; are you aware of that?—Yes, that would be much better still.

2775. You think it would be better so?—Yes, a judge in a big town knows nothing of the individuals; he practically would act on the recommendation of his registrar, who knows the solicitors of the place. But it would be better that a list should be prepared by the Incorporated Law Society.

2776. Do you think that the funds, the corpus, ought to be under the control of the Court?—No.

2777. You would leave the corpus also in the hands of the judicial factor, would you?—Yes, I think so, letting him give security if necessary. I would only have the Court intervene where there was a disputed point to be decided.

2778. But, at all events, whether that would be the wiser way or not, it would not interfere with the scheme or system, if you were to require the money to be paid into the control of the Court, would it?—No.

2779. Have you thought about the appointment or employment of district registrars. I do not mean the county court registrar, but the district, for such purposes?—In Birmingham the district registrars are the county court registrars; they are the same person.

2780. But where it is otherwise, do you think it would be preferable to keep it in the hands of the county court, at all events, in small estates?—The county court has certainly all the banking machinery necessary.

2781. About the extension of jurisdiction, I think you have jurisdiction in the case of companies

*Chairman*—continued.

panies up to 10,000*l.*?—Yes, in winding-up. We have unlimited jurisdiction in bankruptcy; we have jurisdiction up to 50*l.* in actions of contract, and up to 500*l.* in equity.

2782. And how much in actions of tort?—Up to 50*l.*, except in remitted actions of tort, where the plaintiffs cannot find their security; there again the jurisdiction is unlimited.

2783. It is not part of our reference, but it comes in incidentally to that. Do you think that there is any reason for those various differences of amount?—The principle seems to be this: that the easier the case is to decide the less jurisdiction the court has to decide it.

2784. The most difficult, I suppose, are bankruptcy cases, in which you have unlimited jurisdiction?—And the most complicated points arise in bankruptcy where we have unlimited jurisdiction. And then, again, in remitted interpleaders up to 500*l.*, questions on bills of sale are far more complicated than an ordinary contract on a bill of exchange for 500*l.*

2785. However that may be, what do you think the limit should be as regards trusts administration if such powers were consigned to the county court?—There, again, there is a difficulty, because I think big courts ought to have more jurisdiction than small courts. At a small court the judge attends very seldom; he may get a good man for registrar, or he may not, but the salary is very small; whereas in big courts you have the registrar in attendance day by day, and the judge in attendance four or five times in the week; and the registrars are paid, as you know, within 100*l.* the same salary as the judge, and, therefore, you get a very good man.

2786. Would you have selected county courts, as you do in bankruptcy?—Yes, you might say the courts that have bankruptcy jurisdiction. That would be a rough and convenient line to draw.

2787. Supposing that it was desirable to effect this change, do you think that the thing could be done by means of rules of court, to any extent, without legislation?—No, I do not think so; I am afraid not.

2788. You think it would be necessary to have legislation?—Certainly. I think that your judicial factor, or whatever he is to be, ought to have a statutory status; he ought to be a *quasi* corporation like a trustee in bankruptcy, with power to sue in his own name. That, of course, would not interfere with his private practice in any way; he could be a partner in a firm as usual.

2789. What do you say with regard to the maladministration of trust funds at present; do you think that there is much malversation?—It is very hard to tell: because among the poor, a poor man is very seldom prosecuted, it is not worth the expense. In the cases that come before me there is always a malversation; but then only a small percentage of cases come before me, of course.

2790. But do you observe many traces of it?—Yes, I am afraid I do.

2791. Do you think that that generally happens when one trustee is left uncontrolled by other trustees?—No, I think a great deal of it arises from people having absolutely no notion



*Chairman*—continued.

what the law is, or from being utterly unbusinesslike.

2792. You think it arises less from dishonesty than from ignorance?—Yes, to some extent.

Sir *George Osborne Morgan.*

2793. Or from good nature, easy-goingness, would you say?—When a trustee applies money to his own use, it is charity that begins at home. I may, perhaps, say that the English law seems to me to be defective on this point: that you cannot punish a fraudulent trustee unless there is an express trust in writing. I would extend that, as the Indian Penal Code has done, to all express trusts. The offence of criminal breach of trust in India applies to every express trust, whether it is expressed in writing or not.

*Chairman.*

2794. You would make the criminal law more severe with regard to trustees, then?—I would make the criminal law more severe with regard to trustees, and the civil law less severe. I think that a dishonest trustee ought to be punished criminally, and an honest trustee not punished at all. And I also think you want, very badly, some officer whose business it is, in the case of a small intestacy, to take possession of the estate. In the colonies, for instance in Gibraltar, there is an officer called the administrator general, whose duty it is in every case of intestacy to take possession of the estate. That in England would, of course, work out to an absurdity; estates under 20*l.* ought to be excepted. No administration is ever taken out by the very poor.

Mr. *Greene.*

2795. It is not required, is it?—It cannot be done without fees; I think theoretically it is required, but it is never done. Judging by the cases that come before me, there is always a good scramble as soon as the man is dead; and I would not interfere with that, it does substantial justice.

*Chairman.*

2796. You would not interfere in small cases, where they really never come into court at all, where it is a question of the widow and children?—No; the people on the spot take the goods, and that meets the substantial merits. The children away get nothing, but there is no reason why they should; it is the people who have looked after the man when he is dying that get what is left.

2797. But in other cases you would have an officer whose duty it should be to take possession at once, in cases of intestacy?—Yes.

2798. But it would not be very easy to know what were cases of intestacy at once, would it, without prying somewhat inquisitorially into the circumstances of the family?—No, he would have to be moved by somebody. But there are very often cases where information would be given, and where property could be saved.

2799. Would it be sufficient, in your mind, to enable any person interested in such cases to apply summarily himself to the county court judge in order to get protection, so that the official receiver, for example, or somebody else, should

*Chairman*—continued.

should be at once appointed in cases of necessity?—Yes; but I would not have the official receiver; I would keep bankruptcy apart from it altogether.

2800. You would prefer one of these judicial factors?—Yes.

2801. Some person, at all events, deputed by the judge, armed with full authority?—Yes; or rather the Registrar ought to be able to make an order, because he is always on the spot; whereas if you take the case of a travelling county court judge, he is only there once in two months sometimes. The Administrator General in the colonies, who is bound in every case to act, works out as an absurdity of course. An Administrator General came to me (he was the registrar also of the court in Gibraltar) and asked me what he should do; a Maltese woman had died, and he had taken possession of the property, which consisted only of an old box, a dirty petticoat, and several bugs, and he asked me what his duties were.

2802. It should be left discretionary, you think?—It must be discretionary, in those very small cases, whether he should do anything or not.

Sir *George Osborne Morgan.*

2803. I suppose, from what you say, that you would be disposed to treat a trustee very much like a gratuitous bailee?—Yes.

2804. That is to say, if he took as much care of his trust property as a reasonably prudent man would take of his own, you would absolve him from liability?—Certainly.

2805. With regard to these costs in the county courts, from your remarks I gathered that the smaller the property generally the larger in proportion the costs?—Yes, the smaller the property the larger the costs.

2806. Have you any higher and lower scale of costs in the county court as they have in the High Court?—There is a special equity scale, which is framed, I think, on the Chancery lower scale.

2807. Did I correctly understand you to say that you were in favour of extending the limits of the equitable jurisdiction of the county court beyond 500*l.*?—I have really not considered that. I think that the big courts have more work to do than they can do at the present time.

2808. Would not the county courts have more work if the limit was much extended; if it were extended, say, to 10,000*l.*, you would have an enormous number of administration suits thrown upon you, would you not?—Yes; the court, as at present constituted, could not do it, I think. On the other hand, it is a great hardship to people in the country to have to come up to London.

2809. I think you said that in cases of intestacy there was a sort of scramble in small estates?—Yes, I often have that before me.

2810. As a matter of fact, under a recent statute, the widow takes everything up to 500*l.*, does she not; I think I helped to pass that statute which gave the widow, up to 500*l.*, a right to the estate, to the exclusion of everybody?—I really forget, but I think that is so.

*Chairman.*] There is a provision protecting the widow up to 500*l.*

Sir *George Osborne Morgan.*

2811. But, as a matter of fact, in the case of poor people, I suppose they are so ignorant of the law that they take it into their own hands?—Absolutely.

2812. I suppose you are generally acquainted with the tenour of the Bill of my honourable and gallant friend Colonel Howard Vincent for the appointment of a public trustee?—I am sorry to say I have not seen it.

2813. You know, of course, that the object of it is to appoint a public trustee very much of the same character and with the same powers and jurisdiction as the Administrator General in New Zealand?—Yes.

2814. I am afraid that proposal has not met with many friends amongst solicitors?—No.

2815. At least to judge from the remarks of some who have come here. Of course, the hostility of solicitors is a very important element in considering the chances of success which a system of this kind would have, is it not?—Most certainly, because they advise their clients.

2816. I am afraid we have had some experience of that in the case of the Land Transfer Act of Lord Cairns, have we not?—There is an honest but organised opposition against both the Land Transfer Act and the public trusts schemes.

2817. Do you think that that hostility of solicitors would be disarmed if such a system of administration as you have suggested or the Scotch system of judicial factors were adopted?—I think it might be, and I hope it would.

Colonel *Howard Vincent.*

2818. You have had considerable experience in trusts administration, have you, as county court judge?—Not very large. I discourage administration suits as much as I can, because I find the estate is wasted in costs. I encourage people to compromise in any way that they will, if possible.

2819. Has your general experience led you to believe that the appointment of such an official as a public trustee would be highly desirable?—In larger trusts it would be an enormous boon to the trustees themselves.

2820. Is there not great difficulty at the present time, on the part of the public, in finding suitable persons to act as trustees and executors?—Very great difficulty; and anybody who is in any position is continually worried and bothered to become trustee. I have had to refuse, within the last year, four trusts that I should have liked to have undertaken, but really could not, because I have as much as I can deal with.

2821. And the expense at the present time of private trustees is very considerable, is it not, owing to death, or their leaving the country, or becoming otherwise incapacitated, all of which adds to the expense to the estate?—In regard to changes of trustees, I do not think those expenses form any very considerable tax on trusts.

2822. Do you think there is considerable loss to the community at large by either accidental or wilful default on the part of trustees?—In large cases, it only comes before me in bankruptcy, and in 10 years, I have only had to order

Colonel *Howard Vincent*—continued.

order the prosecution of four solicitors; but those were very bad cases, being all cases of highly respectable men who committed breaches of trust.

*Chairman.*

2823. Or persons who were supposed to be highly respectable men?—I think they were when they began: and they went down hill.

Colonel *Howard Vincent.*

2824. Do you know at all whether those cases were found out by the Incorporated Law Society before they came to you?—They were cases of bankruptcy.

2825. And the proceedings before you brought about the disclosure?—The public examination and other proceedings taken by the Official Receiver brought about the disclosure; but my Official Receiver, who could give you important evidence on that point, is the Official Receiver for districts outside of Birmingham.

2826. Do you know what steps were taken by the Incorporated Law Society in those four bad cases?—Three of them were prosecuted by the Treasury, under my order, and one had seven years, and the others were given terms of imprisonment; and then the Incorporated Law Society, of course, would strike them off the Rolls.

2827. But there is no doubt that there is a considerable amount of misappropriation of trust funds that never comes before any court at all?—Yes; cases that one knows about privately.

2828. And which are never heard of in the public courts at all?—And which are never heard of in the public courts at all, where a relation commits a breach of trust, for instance.

2829. And such cases are hushed up?—Yes.

2830. You spoke just now of the hostility of solicitors to this Bill; how has that come to your notice, may I ask?—I happen to read the "Solicitors' Journal," and very few weeks pass without some comment on the Public Trustee Bill appearing in it.

2831. Why do you think they are opposed to it?—They are opposed to it on various grounds. Of course, they derive a large income from the administration of trusts; and not only that, but trusts work indirectly into all their business, having a trust in their office brings other business with it. And then also, no doubt, a family solicitor takes a very great interest in the family; he does his very best for the family, and he likes to have all the family affairs in his hands, not for selfish reasons, but for unselfish reasons.

2832. Sometimes, I suppose, for selfish reasons, in the way that they take care of a good account?—More than that I think.

2833. But from what you have read and heard you gather that the opposition is of a professional character?—It is professional. It is, if I may say so, perfectly honest; but it is partly founded on personal interest, partly on professional interest, and partly on the interest that a man does feel in the family of a client whom he has known for a long time; he identifies himself with the family to a great extent.

2834. Occupying such an important judicial position as you do, may I ask whether you think

Colonel *Howard Vincent*—continued

that the professional opposition of solicitors ought to weigh with the Legislature in bringing about a desirable reform?—Yes. I think it ought, for this reason: that the Legislature can make an Act of Parliament, but it is only the solicitors and their clients who can apply it.

2835. But if the public are anxious to have an opportunity of appointing a public trustee, is it not reasonable that the Legislature should give them that opportunity?—The public are absolutely in the hands of their solicitors, I believe. I always consult my solicitor if I am in any difficulty myself.

2836. In the case of those four trusteeships which you, unfortunately for the trust estates, declined last year, would it not have been a great advantage to the beneficiaries, or persons interested, if they could have had an opportunity of placing the trusts in the hands of a public trustee?—I think that might have been so. May I say this: that if you could join a public trustee with a private trustee, it would enormously strengthen the hands of the private trustee in refusing to commit a breach of trust; a breach of trust I mean for the benefit of the *cestui que* trusts, not for the benefit of the trustees, of course.

2837. Do you think the appointment of a public trustee would interfere seriously with the solicitors, provided that it was entirely voluntary, and provided also that the public trustee was enabled to work in conjunction with the private trustee; and further, that by the constitution of his office, and the practice of his office, he continued to employ the family solicitors' bankers and accountants?—It is very difficult to judge. The same arguments were, of course, brought forward with reference to the Bankruptcy Act, as to vesting bankruptcy in the control of a public department. In that case the solicitors certainly have lost in money, and they certainly feel annoyed by the supervision of the public department.

2838. But the public have gained, I suppose, by the present administration in bankruptcy?—I think so. I was on the Departmental Committee on Winding-up, where we investigated practically charges against officialism, and we came to the conclusion that the official work was exceedingly good, and that the charges against it broke down utterly; the Committee unanimously came to that conclusion.

2839. That is to say, that in securing honesty of trade and the general interest of the public, the present bankruptcy law has worked advantageously?—I think so. The difficulty is, of course, that there are so many private arrangements outside bankruptcy that one does not know what goes on there. I have no doubt that there are a great number of honest cases of private arrangement; but in the cases that come before me, I generally find that there is gross fraud. But then those are the cases that would come before me.

2840. Do you entertain any objection yourself to the creation of a voluntary office of public or official trustee; that is to say, a public officer as public trustee to whom the public would go perfectly

Colonel *Howard Vincent*—continued.

fectly voluntarily with no compulsion of any sort or kind, but who would simply be there to take such business as was offered to him by the public, charging fees, of course, for the work he did?—I have no objection to it, but I very much doubt whether it would pay its way.

2841. That would only be a matter on which one opinion would be quite as good as another, would it not?—Entirely. I have no material, no basis whatever to form an opinion upon. If I may answer your question a little more fully, I do not quite understand, if you instituted a public trustee, who would have the choice of going to him. I have no doubt that he would have an enormous amount of business, if a trustee himself could say, "I will transfer the trust to a public trustee." I think we should all do that at once. I, personally, should transfer at once any simple trust to a public trustee; but I did not know whether under your scheme it is only possible that a *cestui que* trust should choose the public trustee, or that the acting trustee might devolve his duties upon him.

2842. I think the idea would be that either a trustee who, for reasons known to himself, was anxious to avoid a trust should be able to resign it, or that the *cestui que* trusts, for their better protection, or the remainder-men for their better protection, might have the trusts transferred; or that the settlor, in creating the trust, might appoint the public trustee?—You might have a rush of trustees wishing to get rid of trusts, I think.

2843. That would show a considerable demand, at any rate, for such an official, would it not, if it would get rid of the burden, which the public dislike, of trusteeship?—It is an almost intolerable burden at present.

2844. And relief from that burden would be desirable?—Certainly. I, personally, would pay a halfpenny in the pound extra income tax to get rid of trusts and the obligation of refusing trusts.

Mr. *Greene*.

2845. Upon that last point of the transfer of trusts by trustees to a public trustee would you provide that the public trustee could discharge the retiring trustee, or would there have to be a process in court to get his proper discharge before the public official could take over the business?—I think the public trustee ought to have power, where everything was straight, to give a discharge. If he felt any doubt, then he would refer the matter to the court.

2846. Then in a case where the public trustee did not like to take the responsibility, in point of fact you would enable the retiring trustee to do, perhaps, what he would have to do now; that is to say, it would be equivalent to going to the court?—Yes, I think in a simple case the public trustee ought to say, "Everything is straight; I will give a discharge."

2847. After hearing the beneficiaries?—Yes; after hearing the beneficiaries.

2848. I am going to take another point of view altogether; you suggest that the Criminal Law should be amended with a view to punishing a defalcating trustee?—Yes, without written trusts.

2849. I want now to direct your attention to the possibility of preventing a defalcation rather

Mr. *Greene*—continued.

than punishing after defalcation, and I am going to ask you this, please: Is it your experience that most of the defalcations (of course, I mean dishonest defalcations) have arisen through the property falling into the hands of a sole surviving trustee, by survivorship, only?—I do not think that has been my experience.

2850. Have you found two trustees to combine; is it your experience that two trustees would combine to act dishonestly, or is it more likely that it is a temptation which a sole survivor gets to misapply the money?—One of the worst cases that we had in Birmingham was that of a firm of solicitors.

2851. Who were trustees?—Yes, they had trusts in the office.

2852. Then they were not trustees, but solicitors to trustees?—They were solicitors to trustees, and also trustees themselves.

2853. I want to know whether you think that it would be possible to take any measures to prevent a sole surviving trustee from defalcating, by requiring that wherever a sole survivor has property vested in kind by survivorship, he should not be able to transfer the corpus without notice?—I think that would be useful. You would have to provide that he might charge the trust fund with the expenses of the notice.

2854. Do you think that it would be a good plan if all companies or persons who pay income direct to a *cestui que* trust should be required to notify to that *cestui que* trust before the corpus is permitted to be transferred?—That would be a further security. I do not know whether there would be any difficulty in working it out. I do not see any at present.

2855. Many railway and other companies' stocks and dividends are paid direct to a *cestui que* trust?—Yes.

2856. But the corpus remains, perhaps, in the name of a sole survivor, who could transfer it?—Yes.

2857. And it is not until the first lapse of dividends that the *cestui que* trust becomes aware of the defalcation?—No.

2858. Do you think it would be a reasonable proposition for the Legislature to require, under such circumstances, that a notice should be sent to the beneficiaries a certain length of time before the transfer takes place?—I do not know whether there would be any difficulties in doing that. Are there not many companies where a trustee does not appear as a trustee on the books?

2859. That is so; but I am only taking it that the recipient of the income might be protected by the Legislature requiring that so long as he has an order to receive the income, at least the corpus shall not be taken away without his knowledge?—The difficulty that I see is: how to enforce the obligation on the companies. Would you make them liable if they did that? I suppose the companies would raise objections, but the public would not raise any.

2860. At the present time, as a matter of fact, in many companies where the property stands in the name of more than one, a notification is sent to each that a transfer is contemplated, is it not?—That, I think, is done voluntarily.

2861. I was wondering whether that could be extended

Mr. *Greene*—continued.

extended compulsorily to make it satisfactory?—The public would like it, but I do not know that the companies would.

2862. Do you see any means of preventing the continuance of sole surviving trustees; would it be possible to require that the number of trustees should be filled up in every case?—If you had a public trustee you might say that whenever there was a sole survivor he should join the public trustee with him.

2863. Or a judicial factor, or whatever you might call him, such as the learned Attorney-General has suggested?—Whatever one calls the official, I suppose under the public trustee you would have local factors

2864. So that if in any district there was a case of a sole surviving trustee, would you think it desirable that the law should so operate that he could not have any further dealings with his trust property, without taking as his colleague that official, until further order from the tribunal?—Yes; just as when a trustee in bankruptcy dies the estate re-vests in the Official Receiver; whenever the person clothed by law with the estate dies or disappears.

2865. It does not pass to the representative of the trustee or person clothed with the estate?—No, not under the Act.

2866. Do you think it would be desirable, if it is possible, to prevent the devolution of a trust upon the executors of the last surviving trustee?—Certainly. I would make a trustee a *quasi* corporation, and then, on his death, I would temporarily let the estate vest in the official trustee until the parties had chosen another.

2867. At present, as I dare say you would agree, the law is that the executor of an executor may find himself saddled with a trust which he knows nothing about?—Yes.

2868. And in possession of the funds, he never having been selected by the original testator or settlor?—Yes; and he may have great difficulty in finding out where the funds are.

2869. So that the institution of such an official as is suggested would be a very useful provision in the case of a sole surviving trustee would it not?—Yes. I believe that at the present time, in case of intestacy the property is supposed to vest in the President of the Probate Division. I think, that there again, if you have a public trustee, in case of intestacy it ought to vest in him.

2870. But, supposing there is a distribution, such as the learned Attorney-General suggested, over the areas covered by the District Registries, or the County Court Judges, would you make it that the property should fall to the public trustee of that district in case of intestacy?—You might have one official called the public trustee, and work it in the district by means of a judicial factor. You would have a central controlling officer.

2871. Do you think it would be better to have a central controlling officer or to leave it to the judge, as you rather contemplated just now, of each district?—I prefer that administrative work, as I said to the learned Attorney-General just now, should be done by an administrative and not a judicial body. I would confine the judicial work to work done on application by the judicial factor.

2872. The system that you are at this moment considering would enable the court, if the parties desired it, to take the trust away again, I presume, from the public official, if they chose to fill up the number of their trustees?—That depends on how the system is worked out. I think we have discussed both theories.

2873. If you provide a judicial factor, or whatever his title may be, who, as you say, ought to hold the *corpus*, should he hold it in his own name; supposing it was shares, say, with the description of his judicial factory?—Yes; just as a trustee in bankruptcy does.

2874. What does he do; will you kindly tell us?—He is entitled to be sued in the name of the trustee of the estate of So-and-So.

2875. But shares are not transferred in his name, are they?—Shares vest in him, I think. He sells them, of course.

2876. You suggest that he should give security?—Yes.

2877. What I wanted to deal with was this point: that, supposing the money stands in his name alone, unless it is recorded in the books of the company that it is judicial factory property he could remove it without any difficulty, and the beneficiaries could only fall back on the security; is not that so?—Entirely. It ought to appear as judicial factory property.

2878. Then the company would be restrained from parting with it unless he produces a judge's order?—Yes; that might be done. He would be a *quasi* corporation.

2879. But you would not let the property stand in his name without the company having knowledge of the judge's order for the removal of it, would you?—I would let it stand in his corporate name, and not in his private name.

2880. And then they would naturally require some evidence of the court's sanction to the removal?—Unless there was a central public trustee, who could, of course, give the necessary certificate, just the same as the judge.

2881. Then, when you appoint solicitors in the way you suggest, making them *quasi* corporations, it would be the individual appointment of one partner, I take it?—Yes. There is a provision, I believe, in the Bankruptcy Act for two or more persons being appointed a trustee; but I would appoint one person.

2882. And on his death there would be reversion to the Crown or public trustee?—Yes.

2883. Is there any difficulty found now in managing real estate, leasehold or freehold, which falls into the hands of the Official Receiver?—I do not think there is.

2884. Take the case of a farm without a tenant being thrown on his hands; what would happen?—He has to do the best he can, of course. An Official Receiver would give you much better evidence on that point than I could. That only comes before me when some legal difficulty arises that has to be settled in court.

2885. I think you mentioned that you had an Official Receiver who could give us evidence?—Yes, he is a very competent man of great experience;

Mr. *Greene*—continued.

perience; he has been 10 years official receiver of Birmingham, and he had a large practice before he was appointed.

2886. Does he have to deal with the realisation or management of real estate under trust?—All kinds of estate; his name is Mr. Luke Sharpe.

2887. You were rather in favour of allowing a trustee to be protected, so long as he acted *bonâ fide;* but surely he must act according to the terms of a trust, must be not?—Yes, certainly, if the trust is clear; but if the trust be not clear, I would protect a man who acts reasonably.

2888. Are they not protected if they act reasonably now, or if there is a doubt in the construction of the investment clause?—There have been some very hard decisions. It is said now, of course, that the man ought to have applied to the court to get a judicial construction; but a layman does not often know beforehand that a difficulty will arise.

Mr. *Greene*—continued.

2889. Would you relieve a layman of any liability if he invested the property in securities which he thought fell within the range of the investment clause, but which any lawyer almost might think did not?—I do not know that I have ever thought out that point.

2890. Because, otherwise, if you are merely to let the measure of protection be their *bonâ fide*, the testator's or settlor's views may be totally set at defiance; is not that so?—I should certainly like to see that any person charged with a *bonâ fide* breach of trust should have the case tried by a jury, and not by a judge alone. I think that would be a very efficient protection.

2891. You could hardly have that if it depended upon the construction of the investment clause, could you?—No, perhaps not.

Mr. EDWARD LIONEL ALEXANDER CLARKE, called in; and Examined.

*Chairman.*

2892. YOU are a chief clerk in the Chancery Division of the High Court of Justice?—I am.

2893. And you have had great experience in that capacity, I think?—Yes, I have had 15 years' experience as chief clerk; and formerly I was in practice as a solicitor.

2894. Would you kindly tell us to what extent and in what circumstances you have to deal in the Chancery Division with the administration of trusts, if I may put so large a question that you may answer it in your own way?—Up to within the last few years many trusts, especially large trusts, were administered entirely under the direction of the court; but of late years there has been a tendency on the part of judges, in order to save expense, to discourage what is called general administration, and even, I think, to discourage the transfer and payment of funds into court, and to reduce the functions of the court more or less to a tribunal for deciding questions of construction that arise from time to time; so that the general administration business has much decreased on that account.

2895. Now, taking the principal subjects of trust; I take for example, to begin with, marriage settlements where there are trustees; does the Court of Chancery ever administer the trust of a marriage settlement continuously for many years now?—Of late years it has very seldom done so. It was formerly the right of a party, of a *cestui que* trust, to have general administration under the court; but now, by one of the Orders (Order 55, Rule 10 I think), the court has a discretion as to whether it will give general administration or not; and it does so very rarely in order to save expense.

2896. So that practically there is very little of that work done now by the Court of Chancery?—Very little of that continuous work. Originating summonses are issued for the determination of particular points, either of construction or administration, *e.g.*, as to whether or not a certain contract shall be carried out.

Sir *George Osborne Morgan.*

2897. Is that under Lord St. Leonard's Act?—No, that is under the more recent Judicature Rules.

*Chairman.*

2898. You have said more than once that the ground on which that practice has been discontinued, largely at all events, is the ground of expense; is it the case that the continuous administration, for example, of a trust of a marriage settlement is a very expensive business in Chancery?—I think not. I think that if the security either of the court or of an official trustee is required, it must be paid for, and that the security obtained by the court, so far as I can judge, is not more expensive than that of an official trustee would be.

2899. But without going into the question of an official trustee for the moment, and dealing with the expense in the Court of Chancery now, supposing that there were trusts for a marriage settlement, and an income settled of, say, 1000*l.* a year, and that there was a continuous administration in the Chancery Division, what sort of expense would that, do you suppose, involve annually?—The expense, as regards the court, would be very small; the fee for taking accounts is 1*s.* per 100*l.* on the gross receipts, coupled with a fee on certificate at the end of 10*s.* Any expense beyond that would arise from the charges of the solicitors on both sides, for the trustee and for the *cestui que* trust.

2900. Would it be practicable to administer in Chancery such a trust without having solicitors employed on both sides?—It would be practicable, but it would lead to trouble to the parties and to the court, from want of knowledge how to conduct it. At the same time, it is done; where a party chooses to appear in person he does so, either a trustee or a beneficiary.

2901. Of course, it is very difficult to generalise on the subject; but where the solicitors are employed for trustees and *cestui que* trusts under such administration as I have referred to,

it

*Chairman*—continued.

it would be a considerable annual cost as a rule, would it not?—It might be done for a very moderate percentage on the income. The cases that you hear of, where the costs are large, arise from the conduct of the parties; the parties make the costs large. If the trustee and the *cestui que* trusts quarrel, for instance, and every item in the account is disputed to the end, the costs will be enormous. The court, of course, has power to saddle the costs on the right individual in that case.

2902. In such cases in actual practice, in fact, does the administration go on smoothly and inexpensively?—In a great number of cases it does.

2903. We have had evidence upon this subject from Lord M'Laren in regard to the Scotch system, and since then I have received a report of the accountant of court to the court, and I took the first page and I have made an abstract of that; the first page of the annual account closed on the 30th of June 1893; I want to put it to you with the view of asking whether you could assist us to see whether anything of the same kind could be carried out in this country. There are 15 factories, as they are called, of separate estates, on this first page, and the total amount of capital of funds and effects ascertained is estimated, of those 15 estates, to amount to 68,952*l.*, I leave out the shillings and pence; I find that the factor's commission, taking all the 15 estates together, amounted to 192*l.*, again I leave out shillings and pence; that the accountant of court's charges, on all the 15 together, amounted to 23*l.*, and that the law agent's charges on all the 15 together, amounted to 5*l.* 11*s.* 10*d.*; that, of course, it is important to bear in mind, is obviously mere administration?—I do not quite understand what services those fees are in respect of. Is that the annual charge for administering the income, in fact?

2904. That is exactly what I am asking about, because in my previous question I was going to say that that would seem to represent administration practically and the auditing of his accounts by the judicial factor?—It might do so. I have not any knowledge of it, except what you have told me.

2905. Will you look at this paper (*handing the account to the Witness*)?—This looks like what we should call passing an account of income in the courts. I can only say that if the accountant was content with half-a-crown for passing an account of 74*l.* 1*s.* 9*d.*, the accountant, I think, must have done very little, and exercised very little discretion in the matter.

2906. Let me add to that the evidence of Lord M'Laren, who told us that for 50 years there had never been one shilling lost in any one of those judicial factories to the *cestui que* trusts. That shows a very moderate scale of charges, does it not?—It does. I think that the office of judicial factor must be considered an honour in Scotland if it is undertaken on such terms.

2907. I want to put to you the judicial factory system; I am taking that as an illustration, with a view to getting the benefit of your great experience, so as to see whether you could assist us to anything of the kind that would be useful in

*Chairman*—continued.

England. The system, as I understand it, is this: that, whether for taking out of probate or letters of administration, or for the administering of an annual trust, or in any case of trust, the court will appoint a person who is not an official of the court, but who, for a commission varying from 1 to 3 per cent. of the income, will administer that trust whether it be for immediate distribution or for continuous distribution. The point is whether you can recommend anything of the sort for adoption in this country?—The same thing is done here to a great extent when receivers are appointed by the Court of Chancery in the case of income. The receiver, who is a person appointed by the court but not an official of the court, receives the income, and makes the necessary payments on the other hand, and is paid by commission somewhat similar to what you have stated.

Sir *George Osborne Morgan.*

2908. Five per cent. very often, is it not?—Very often it is less than 5 per cent.; 5 per cent. is a kind of maximum, except in the case of weekly rents, where, of course, the commission has to be higher. But with regard to what was said as to taking out probate, the Probate Court in this country grants probate to an executor if there is one, and, if there is none, to one of the family as administrator, and, although a receiver might be appointed pending the grant of administration or probate, he never would take out probate himself under the present state of the law. And it appears to me that the relations might object to a judicial factor or a receiver taking the administration out of their hands. That would cause a certain amount of expense; I do not think we could get it done here on the terms for which it seems to be done in Scotland; and the family would say that they could do it cheaper themselves.

*Chairman.*

2909. You see the point we are rather inquiring into is, to prevent, if we can, those malversations of trusts that occur, according to the evidence before us, only too frequently; and of course there would be one element, and that would be the element of security, if the thing were done under the court, would there not?—A receiver and manager usually gives security in England.

2910. But receivers and managers in England are appointed, one knows, in the case of companies, and also in the case of individuals having business to carry on?—Yes, in the case of partnerships.

2911. That is in an ordinary case of litigation in the Chancery Division, between partners, for example?—That is very common.

2912. But is it not the case that when receivers and managers are appointed their commission, as a rule, by no means represents the total costs but that there are nearly always solicitors' accounts and bills, are there not, legal charges?—Yes, the receiver generally acts more or less under the advice of some solicitor.

2913. And is it not the case that the process of administration by a receiver and manager is in fact a very costly one, as a rule?—I think it

*Chairman*—continued.

might be very moderate in cases where all parties were reasonable. My experience is that where large costs are incurred it is from the unreasonable conduct of some one or other.

2914. But receivers and managers also are only appointed, as I understand, practically when there is a considerable sum of money involved, or a business of some considerable magnitude; is not that so?—The court would be reluctant to appoint them in a small case, because their commission then must necessarily diminish the fund to an appreciable extent.

2915. It is a matter of judicial discretion?—Yes, entirely.

2916. I take this first page also of the account of the accountant of court in order to see how far we have anything of the kind. I take again this page in order to try and get from you an explanation of the difference between the systems. I find the first estate that is dealt with is an estate of 74*l.* capital in all. I suppose that such a thing as the appointment of a receiver or manager or judicial factor, or anything of that kind, would be quite out of the question here in the case of such a small estate as that?—I think it would.

2917. And the largest estate upon this page is upwards of 27,000*l.* of capital; and there are many other estates I observe; one of 250*l.* on the same page, another 94*l.*, another of 645*l.* I am afraid that in that sort of case receivers and managers would be out of the question, would they not?—If the sums were money (these capital sums), the way I should suggest as the best way of their being dealt with would be to transfer them into the name of the Paymaster General, who would pay the income to the parties entitled, under an order of the court.

2918. Is that often done?—Very often, but not so often to my mind as it might be, because the expense is desired to be saved; on the other hand by saving the expense we give up the security.

2919. Supposing that I were going to settle to-morrow a sum of 20,000*l.* on children on marriage, for example, and wished to go to the Chancery Division and to have that 20,000*l.* put in consols and handed to the Paymaster General in order that the annual income by order of the court should be paid out in accordance with the terms of the Trust, could that be effectively done?—It could. There have been cases where testators have directed in their wills that their executors should commence proceedings within six months after their death, in which case the court has said that while its discretion was quite unfettered by it, the wish of the testator was a matter to be regarded, and orders more or less complete for administration, have been made in consequence.

2920. Would that involve expense?—It would involve certain expense no doubt.

2921. Would it involve much expense in the initial stage, transferring the money to the Paymaster General before the order could be obtained?—The large expense would be the initial order of the court. The Paymaster General does his work for nothing when he is once started. If he is ordered to pay the income of the fund annually to A. B. during life, or until further order, the expense is at at end until A. B. dies. If he can receive the money by post, the Paymaster now sends cheques by post, which is a saving of expense. A power of attorney used to be necessary to receive the money if the party could not come himself.

*Chairman*—continued.

2922. Would it be a considerable expense to obtain an order of that kind?—In a moderate estate of 4,000*l.* or 5,000*l.* I should say the expense would be well under 100*l.* of getting such an order.

2923. And in the case of the 20,000*l.* that I postulated, could you say about what the expense would be?—I do not know that it would make much difference except in large estates when people do things on a rather more liberal scale, and counsel's fees are higher.

Sir *George Osborne Morgan.*

2924. And the scale of costs is higher, is it not?—You may consider the higher scale of costs a dead letter in chancery; it is never brought into action except in very special cases.

*Chairman.*

2925. Can you help us, and, indeed, myself, because I am not sufficiently familiar with chancery matters to appreciate how the 100*l.* would be spent in so simple a process as taking a copy of a marriage settlement and applying by originating summons, if you can do that?—Yes, you might do that.

2926. And to pay the money into court, why should it cost 100*l.*?—I stated 100*l.* as a maximum. I think it might very likely be done for very much less. But the expenses would be in instructions to a solicitor to take action in the matter, and his instruction to counsel, who would probably be employed in a case like that, and counsel's fees for preparing the summons and any necessary affidavit and appearing in court; then there would be the fee on the order, which would be a small affair, either 10*s.* or 1*l.*, and that would be about all I think.

2927. Of course the same sort of sum as you have said would apply if the amount was only 2,000*l.* or 3,000*l.*?—Yes.

2928. It would be in effect prohibitive, so far as quite small properties are concerned, 500*l.* for example, would it not?—That would be within the equitable jurisdiction of the county court, and it might be done in the same way by the county court.

2929. You would not be familiar, of course, with the costs in the county court?—No.

2930. Now, in the case of wills, supposing that a man was to leave in his will, as you instance, and as we have had proved before us has been the practice in a certain family, a direction that in one way or another the trusts of the will, in effect the bequests, should be carried out by the court, would that be an expensive process?—The machinery would be just the same as in the case of a settlement, unless questions of construction arose on the will.

2931. In effect, when the court undertakes that sort of duty, the court is bound in England to discharge the duty itself; it must administer

*Chairman*—continued.

as well as decide, must it not?—Yes, if it undertakes a general administration; but the administration may be limited, according to the discretion of the court, in any way that is desired. The capital can remain with the Paymaster General, and the income be paid to the trustees. If the parties entitled to the income are numerous, for instance, the court can order the income to be paid to the trustees, who will divide it among the parties. The safety of the capital would be insured in that way, while the administration of income, which is a much less risky affair, of course would be left to the trustees.

2932. Of course, when the court itself administers, it is bound to act upon legal and formal evidence, and there must be affidavits; is not that so?—Except that a recent rule empowers the court to act on less than formal evidence, whatever that may be.

2933. Has that rule been acted upon much?—It has in certain cases of pedigree, where there has been a small estate and a very long pedigree, in order to ascertain the parties entitled to a fund, on the death of a tenant for life, for instance, the court has dispensed with certificates, and been content with affidavits by some one acquainted with the family.

2934. But the court is also bound to be informed and to hear both sides, if there are two sides, or as many sides, indeed, as there may be?—Certainly; on a question of construction the court would not decide without.

2935. And, if necessary, on questions of the exercise of discretion such as are sometimes encountered in a trust instrument?—Yes; if there are differences of opinion both sides would have to be heard.

2936. I am acknowledging that that is necessary for the court; I know it is, but is it not the case that that does act in some sense as a stimulant to extravagance on the part of persons interested in the administration of the estate?—I suppose if parties are disposed to extravagance they would find an occasion for it under any circumstances. I do not quite see how it serves as a stimulus, that seems hardly possible.

2937. Are the costs often ordered to be paid out of the trust funds?—Where an ambiguity has arisen from the wording of the testator's will, and also where it is considered to be for the benefit of all parties to have the point decided, in those cases the costs come out of the trust funds.

Sir *George Osborne Morgan.*

2938. And of course the costs of a general administration suit would come out of the trust funds?—Yes.

*Chairman.*

2939. I do not know whether you have thought in detail about it, but have you any suggestions that you could make now, or at your leisure (if you would be so kind as to favour us with your views), in regard to such simplification and cheapening of the practice of the court as would make it accessible to poor people with small estates?—I have not given that subject any great attention, but of course you are aware that a great deal has been done in that way.

*Chairman*—continued.

2940. Yes, I know?—A good deal of the popular idea of the Court of Chancery arises from a recollection of what it was before 1852, and also from a few cases which are heard of by the public and make a great noise, where the costs have arisen from the obstinacy of some of the parties concerned.

2941. May I ask you upon that (a matter in which I have unfortunately had personal experience), whether sometimes the obstinacy of trustees who are not necessarily members of the family at all may not do a great deal of damage in the way of expense?—No doubt; but in that case the court would fix the trustees with the costs, in my experience.

2942. Are they not rather slow to fix trustees with costs personally when they are gratuitous trustees?—Where they think the trustee has done his best, certainly; but if the trustee has caused expense by wilful obstinacy I do not think the court has the slightest hesitation in making him pay the costs.

Sir *George Osborne Morgan.*

2943. For instance, if the trustee paid the costs money into court under the Trustee Relief Act?—Yes, no doubt, where a trustee could have handed the capital over to the *cestui que* trust and has chosen to pay it into court the trustee has been saddled with the costs.

*Chairman.*

2944. You think that now, as things are, the machinery of the court is, in fact, available for small estates; and that is what you would recommend with all your knowledge and experience?—I should certainly, down to 500*l.*, which is the county court limit.

2945. I mean in the case of an estate of 600*l.* I take that because it is just above the margin which you have named?—I should where there was a doubt leading to a desire for extra security. If the parties had any doubt about their family trustees I should recommend the adoption of administration through the court.

2946. Supposing a case, which is what I have got in my mind, either of a marriage settlement for a small sum of 1,000*l.*, which sometimes happens though not very often perhaps, or of a man leaving anything between 500*l.* and 1,000*l.*, and not having available private trustees whom he can rely upon, would you in that case think he would come well out of it if he was to direct that those moneys should be vested in chancery?—If no trustees could possibly be found. Of course the administration in court would cost more than the administration would if you could get proper family trustees and do it out of court; but if you could not find any trustees I should say that you could not do better than, in the cheapest manner and without any friction between the parties, have the funds transferred to the Paymaster General and the annual income paid to tenant for life.

2947. But the least friction would produce considerable cost, would it not?—Yes, any friction would produce expense.

2948. What do you say in regard to the

*Chairman*—continued.

appointment of a public trustee, what do you think about that?—I think that the duplication of offices would cause unnecessary expense. I think that a trust estate administered by a public trustee without the assistance of the court would cost as much as the administration by family trustees, or no trustees with the assistance of the court; for this reason: that the public trustee could only act (to my mind) on the same evidence as the court does; he would have none of that knowledge of the estate and of the family that the private trustee has; and moreover I am inclined to think that parties in laying evidence before the official trustee and in making application to him would be quite as inclined to employ solicitors as they are now in dealing with the court. For that reason I think that the creation of the office is unnecessary. There is a very efficient machinery for securing trust funds, and also for administering them, by the machinery of the present Court of Chancery, and you would create a rival to that and cause double expense if an official trustee was appointed. If he got into his hands any large proportion of the trusts of the country he could not possibly know, personally, anything about any one of them; and he would have to employ a staff of competent officials, which I think would have to be as numerous and as able as the present officials of the Court of Chancery.

2949. You do not think that anything could be done by attaching to the Court, and making subordinate of course to the Court, various officials in different parts of the country who could subdivide the work, and be commissioned to go and make inquiry, and be familiar, more or less, with the class of people they were dealing with?—I think it is very difficult to get an initiative from a public official. I take it that you mean that the sub-officials of the official trustee should take the initiative, and make inquiries as to what was necessary to be done in certain estates?

2950. Yes?—I think there would be great difficulty in that. I think that an official can scarcely act, except when set in motion by the parties; and I venture to doubt whether in the end the official trustee would do more than that.

2951. Are you able to assist us to any methods by which we can avoid the great loss that is occasioned by defaulting trustees?—I think that any practical provision for preventing a surviving trustee from acting as a sole trustee would be very valuable; but there is a great practical difficulty which I should be very glad to see overcome if possible. The suggestion I think made just now was that a surviving trustee should not be able to deal with the funds. Now, the banks and the companies, the Bank of England and other companies, have no notice of a trust whatever; to them trustees are nothing but joint tenants; and they have no power to prevent a survivor on joint account from dealing with it until he has given notice to the *cestui que* trust, because they do not know that there is a trust.

2952. What they require, I believe, is to prove that the other is a dead man?—That is all.

2953. And when that is done they shrink from further inquiries?—The trustees do not come before them as trustees; they are simply joint tenants.

*Chairman*—continued.

Sir *George Osborne Morgan.*

2954. They absolutely ignore the trusts and refuse to recognise them in any way, I think?—Yes.

*Chairman.*

2955. Now, in commerce, for example, would it not be a very dangerous thing to intercept the dealing with funds that may be standing in two names, when one of them dies, until probate is taken out and all the formularies are complied with?—There may be a joint account, of course, without a trust, and then you might interfere with the rights of parties very considerably, if, on the suspicion of there being a trust, the transfer was interfered with.

2956. That is rather what I was directing my question to. If in the case of a person becoming sole owner by survivorship you are always to assume a joint trust, you might be interfering with commercial transactions to a great degree?—No doubt.

2957. Therefore it would become necessary, would it not, if you do restrict its application to trust property, that you should require these banks and other companies to take notice of the trust itself?—Yes; that seems to me the only way of doing it. Of course there would be a strong objection on the part of the Bank of England and other companies to that.

2958. There was indeed a strong objection, was there not, to what was supposed to be a kindred proposal on the part of the Finance Bill last year?—There was.

2959. Do you see any means of getting out of that?—No, I do not. I should be glad to see some means of getting over it. I think it would be very valuable if there were some check on surviving trustees taking the whole control of the fund.

2960. Is there any other suggestion that you can make to us?—There is one point on which I think a public trustee would be rather inferior to the management of an estate by the court; I do not think that his discretion would be quite so elastic. The court, especially in taking care of the interests of infants, is very elastic in its discretion; and to take an instance where an infant is in need of maintenance and education, the Judges of the Court of Chancery will allow his capital to be expended for that purpose, although according to the trust he is only entitled to the income jointly with others, contingent on attaining the age of 21. I think the public trustee would be very difficult to move in such a direction as that; he would always, I think, act according to the strict rights of the parties. I think I have no other suggestion to offer.

2961. Is there any other suggestion besides those which you have mentioned that you can make to us?—I think not.

Sir *George Osborne Morgan.*

2962. Have you considered how far it would be practicable or desirable that a public trustee, as has been suggested, should act conjointly with a private trustee?—I do not quite know what advantages there would be unless the public trustee

Sir *George Osborne Morgan*—continued.

trustee would take the facts from the private trustee; if he would do that it would save expense.

2963. In that case, practically he would efface himself, or nearly so, would he not?—That, I think, would be so. It would save expense if he would take his facts from the private trustee.

2964. At present I believe the only way in which a *cestui que* trust interested in consols, for instance, could protect himself against the action of trustees in whose names the consols were standing, would be by a stop order or distringas?—Yes; and he can even insist on knowing the particulars of the investment for such a purpose; and if the trustee refused, the court would make him give the information.

2965. Have you ever considered the advisability of extending the jurisdiction of county courts in equitable cases beyond 500*l.*?—No, I have not.

Colonel *Howard Vincent.*

2966. People are horribly much afraid of the Court of Chancery, are they not?—Yes; some people are very much so.

2967. Would the proposal to extend the jurisdiction of the Court of Chancery in trusteeships be popular, do you think?—I think so, if it was an optional and simply facilitating measure.

2968. You have a great amount of property of trusteeships in the Court of Chancery?—Yes.

2969. Do you find that want of knowledge of the family interferes with your proper administration?—No; because we act on strict evidence, but that costs money.

2970. The chief clerks cannot be approached, can they, except through a solicitor?—Yes; they can be approached by the parties in person, if they choose to act so instead of employing a solicitor. If there is a solicitor on the record for the party, the solicitor must come; but if parties like to conduct a case throughout in person, the parties in person have a right to audience with us just as much as solicitors have.

2971. Do you not think that a public trustee who sat in an office, and who would be as approachable as any public official, would be a simpler machinery than the Court of Chancery possesses?—I doubt whether he would be more approachable than we, the chief clerks, are.

2972. If I had a case with you, could I go and see you at any time of the day, and talk it over informally?—If I was not otherwise engaged. Of course I have appointments all day long.

2973. But you sit in a judicial manner, do you not?—Yes; but you could get an appointment to speak to me on it. Of course you could not come at any time, because my day is mapped out in appointments, sometimes 20 or 30 in a day.

2974. Defaults by trustees have often been before you in different capacities, of course?—Yes.

2975. And they are very considerable, are they not?—Of course they come before us, many of them; but we have to consider what the amount of trusts in the country is in which we never hear of any such thing, and I have no means of ascertaining that.

Colonel *Howard Vincent*—continued.

2976. But the community suffers a good deal by default of trustees, does it not?—I do not know; I have not much knowledge of how much. It does suffer to a considerable extent, no doubt; but I do not know what fraction that is of the whole.

Mr. *Greene.*

2977. If property consists of real estate or leasehold, how could the Paymaster General deal with it?—He could not; that would be a case, if there was no trustee, for the appointment of a receiver.

2978. Then the receiver would let and sell the property, and so on?—Yes, he would let and manage it.

2979. In point of fact, he would be acting as a trustee?—Yes; if there was no trustee he would be a receiver who would act as trustee under the direction of the court, and pass his accounts through the court.

2980. And he would be very much like a judicial factor?—Yes, so far as I know what a judicial factor is.

2981. Does he get directions from the court at all stages?—Yes.

2982. And he does not have to act on technical legal evidence only, does he?—No, he knows the property; we take the facts from him.

2983. If money is wanted for the purpose of managing the estate, say for the repair of leasehold, or for outlay upon real estate, where does he get it from?—The capital money, do you mean?

2984. Yes?—Surplus income, of course, he would come to the court for leave to employ in that manner; but if capital was wanted the parties would have to come and raise it on mortgage, or get it from personal estate.

2985. Does the court act on his opinion, and are they bound by it, as to what is necessary or desirable?—No, they are not bound by it, but they would take it into consideration.

2986. With regard to sole survivorship, do you often find that the sole survivor of a joint tenancy is beneficially entitled?—Generally not, undoubtedly.

2987. You were talking about companies not liking to deal with trusts, but surely the presumption is that the last survivor of a joint tenancy is a trustee, or accountable?—Yes, that is the presumption; it may not always be true.

2988. In 99 cases out of 100 it would be so, would it not?—I should think very probably.

2989. Then is there not a hardship, in your judgment, in requiring that a person who presumably is not beneficially entitled should be clogged in his power, or that his power of dealing should be clogged until some court or tribunal had become aware that he had got the power?—As the learned Attorney General has pointed out, it might be a case of partnership.

2990. But a partnership even would, generally speaking, import a trusteeship for the widow of the man who had just died, or at all events some accountability, would it not?—It might; but I am inclined to think that it would lead to inconvenience. I have not made a special study of the subject, and, as I said before, I should be very glad if a practicable scheme of that sort could be matured.

*Chairman.*

2991. Is there anything else that you would wish to put before us?—I have one more thing to say with regard to general administration in reference to taking the opinion of the court as to management. The expense of that is very small in the course of a general administration; in fact, as regards the court it is often done for nothing; in small cases of repairs or letting to particular tenants, directions are given without a summons and without an order. An appointment is obtained before one of the chief clerks, the evidence is put before him, and he makes on his notes the direction; and so far as the court is concerned no fee whatever is charged; and

*Chairman*—continued.

that may happen any number of times in a year. Of course the solicitor, if he attends, is paid, and if there is an affidavit there is the expense of the affidavit, which is nothing very formidable; but with regard to fees there are none at all charged under those circumstances by the court; the court does its work for nothing.

Mr. *Greene.*

2992. The affidavit would require an expert, would it not?—It might. If there were a receiver the receiver would be supposed to know, and there might or might not be an expert.

## The Right Honourable the Lord Watson (attending by Special Permission of the House of Peers); Examined.

*Chairman.*

2993. Your Lordship has been kind enough to come and help us in our inquiry. What do you think in regard to the appointment of a public trustee for Scotland, so far as Scotland is concerned?—I speak regarding Scotland only, because I have not sufficient experience of the working of English trust administration to qualify me to give an opinion upon that subject; but with regard to Scotland, I assume, that by a public trustee is meant an officer who either has to hold and administer a trust estate, or who has to hold a trust estate whilst it is administered by the trustees, or to superintend trustees in their management of the estate; he might be an officer appointed for any of those purposes. As at present advised, I am of opinion that it would not be for the benefit of Scotland to appoint such an administrator. My reasons for that are mainly these: In the first place, there has been no difficulty hitherto in Scotland in finding persons capable of discharging the office of trustee in any case that I am aware of. In Scotland it is regarded as a social, or very nearly a religious duty, to take the charge of the estate of a deceased friend; and I am quite satisfied that the administration of honest trustees, aided, where legal advice is necessary, by a capable and honest agent, is the best as well as it is the cheapest of all forms of trust administration. I may add that if there have been cases of loss through dishonesty of trustees, or malversation, no such case has, in the course of the 29 years' experience which I had as a practising member of the Scotch Bar, ever come to my knowledge. From time to time questions have arisen in regard to breach of duty by trustees; but I may say that nearly all of those, so far as they came within the scope of my knowledge or experience, were traceable to periods in the history of my country when proper trust investments (before they were enlarged by subsequent Statutes), chiefly consisting of heritable securities, had undergone considerable shrinkage from local and other causes. For instance, from Glasgow there came many questions of that kind, before Counsel, at all events; they did not all reach the

*Chairman*—continued.

court, though some of them did, arising from the great depreciation of land and houses which followed the failure of the Western Bank, I think in the year 1857; and a similar crop of questions arose after the failure of the City of Glasgow Bank in the year 1878. I may say that those cases, at the worst, disclosed no case of malversation, although they did disclose the fact that in some cases the trustees had, honestly, I believe, committed legal error in making the investments. I must explain my language by saying that in Scotland we apply the term legal to all questions, whether they be of common law or of equity. Then another objection to an official who is to have the full functions of a trustee is this: There are, no doubt, trusts in Scotland which may be termed easy-going, where really there is little to do except to hand over the corpus of the fund at a particular date, there being nothing to do in the interval except to pay the rents and profits as they arise to beneficiaries who are capable of managing their own affairs. But the bulk of trusts, family and other, involve much more onerous and important duties; such as the superintendence, education and upbringing of a family, with a view to their start in life. In many cases in the mercantile world there is imposed upon the trustees the duty of carrying on a trade or business, either singly or in connection with others, with a view of keeping it on foot for the benefit of the family, until they become capable of managing it for themselves. And there is a third class which bulks pretty largely, and that is the management of landed estate, which, since my experience began, has become a great deal more onerous than it was. Many estates require constant attention on the part of trustees, because they require constant and prudent outlay in order to maintain and keep up the value of the estate, without which outlay it would very shortly become dilapidated. That is especially true of all those districts of Scotland which are not let in very large farms, and applies more particularly to the western districts of Scotland. I do not think that one man could, by any possibility, hold and duly manage one-third part of the trusts in Scotland; it would take half-a-dozen

*Chairman*—continued.

half-a-dozen, and I am not sure that that half-a-dozen would comprehend, necessarily, men who are capable of the management. As a matter of fact, trustees are generally selected by a truster who have the capacity for fulfilling the requirements of the office; and although they require legal advice they have always hitherto been quite able, and I have no doubt that in the future they will be able, to obtain it. I might also say that in the case of lapsed trusts, and in the case of all estates belonging to persons incapable of acting for themselves, where either the Court of Session or the sheriff appoints a judicial factor, they generally make the selection of the factor with regard to his special knowledge of the business requiring to be conducted. Where the parties interested in the estate are at one in making a recommendation they almost invariably select the person suggested; where there is a difference of opinion, the duty of course is cast upon the court or the sheriff of selecting some neutral person whom they think fit for the office.

2994-5. In regard to the system of judicial factory, we have heard evidence from Lord M'Laren upon the subject?—I observed in "The Times" that he had given you evidence.

2996. I was going to ask you about that, if you will assist us still further about it. Is it the case that a judicial factor will be appointed wherever the truster wishes it practically?—If the truster were to express the wish I have no doubt the courts would have the power.

2997. Or in the case of a lapse of trust?—In the case of lapse of trust, the court may either appoint new trustees or a judicial factor.

2998. So that there is available in Scotland for anybody who is reasonably entitled to it the process of a judicial factor?—Certainly. In the case of a lapsed trust, there is provision made for a renewal of the machinery of the trustee; and in a case where no person takes up the office it is always open to anyone interested, a creditor or a beneficiary, to obtain the appointment of a judicial factor.

2999. That applies also, and is largely used, is it not, for quite small estates?—It is very largely used for small estates.

3000. We have before us the report of the accountant of court, and I have been asking other witnesses about it. I see little estates of less than 100*l.*, others of 250*l.*, others of 630*l.*, and then as high as 30,000*l.* or 40,000*l.*?—I may mention that more small estates are really a new class brought in by a statute, of which I forget the precise date, which conferred the power of appointing judicial factors in those cases upon the local courts, that is the Sheriff's Court; and those officers appointed by the sheriffs by the same Act were all placed under the superintendence of the accountant of court who is now both accountant of court and accountant in bankruptcy.

3001. It seems, from what Lord M'Laren told us, and from what these accounts appear to disclose, that it is a very inexpensive matter indeed to get a judicial factor in Scotland?—Very.

3002. In the great majority of cases there are no law agents' charges at all, I observe?—Very generally not. A great number of factors have sufficient legal knowledge to act independently. Many accountants especially act as judicial factors in these small estates, and they have generally sufficient knowledge to enable them to act without consulting either agent or counsel.

*Chairman*—continued.

3003. And their remuneration seems to be very modest too?—Yes, it is. I rather think it is fixed by the accountant of court, under the superintendence of the court, having reference to the work required. The statute creating the office of accountant of court was passed in 1849, and a year or two after I went to the Bar, now, I am sorry to say, 44 years ago. I acted for some years as junior counsel and adviser to the Accountant General, and I saw a good deal during that period of the working of the office at that time. There was a good deal of trouble with some of the old judicial factors, the *curators bonis* to lunatics who were placed under the Act for the first time—it was very difficult to bring some of them to book; but so far as concerned officers appointed under the regulations of the Act I think that practically there has been little or no trouble. There are very strong powers given to the accountant of court. If he is dissatisfied with an investment he can call upon the trustee to lodge the money in bank and hand to him the deposit receipt; and that was a power pretty often exercised. Of course, he could not enforce it without going to court, but his means of access to the court are very ready; he has simply to lodge a note with the court, and upon that note they ordain the factor to attend at the Bar, and there give what explanation he can, and they deal with him when he comes up. But, as a rule, the requisition is either complied with or matters are put right. I do not think they have had ever occasion within my recollection to take the next step, that of sending the offender to the Calton Gaol.

3004. The practice seems to be to appoint a judicial factor for an estate, large or small, and then to leave him with full responsibility to deal with it, curtailing any charges that are improper, and giving a very modest commission?—Yes.

3005. Does that work well in Scotland?—I think it works very well indeed; there has been practically no loss through any factorage falling under the supervision of the accountant of court.

3006. There has been no loss since 1849?—Practically Lord M'Laren informed us, I think, there has been no loss since 1849. I believe that, to some extent, losses which had been incurred by the factor through what was held to be his fault have been paid up at once by his cautioner.

3007. By his sureties, that is to say?—Yes.

Sir *George Osborne Morgan.*

3008. He has to give security, has he not?—They do, but there is always a limited amount; it does not extend to the whole amount of the estate, as that would make the office impracticable.

*Chairman.*

3009. Is any difficulty found in obtaining an efficient judicial factor, a man of position willing to accept office?—None whatever. I should say that it had become with many accountants, men of business, part of their business, and I should say also that all the appointments made were of men who are all of them more or less known either to the Court of Session in making the appointments in larger cases, or to the Sheriff in smaller appointments. But perhaps I ought to have added what I have said before, that, although they are in the knowledge of the court, in the majority of cases they are suggested by the parties beneficially interested in the estate.

3010. In point of fact, we have in Scotland a public trustee, if it be a public trustee to be under a public court?—In one form it might be said that we have.

3011. Have you found that the system of judicial factory gives satisfaction?—I have always found so. I have never heard of any complaint made of it, and I have not had any reason to believe that there has been cause for dissatisfaction.

3012. I do not know if you could suggest to us whether anything could be done in England to make receivers or managers under the control of the court more available for these small estates; do you think it would be practicable in England to make a parallel system accessible, especially to poorer estates?—If any reason exists against it, if there be anything in the shape of an impossibility, it is quite unknown to me, nor can I suggest it in my own mind.

3013. There is one point I should like to ask you about as regards Scotland, that is whether you think that the trustee in Scotland (I am now speaking of private trustees) ought to have access to the court for the purpose of asking leave and direction?—I have no hesitation in saying that in my opinion the courts of Scotland ought to give more assistance to trustees in the course of their administration than it is possible for those trustees to obtain at present. I may say that a trustee, when a question arises, cannot obtain a judicial determination in regard to his acting as a trustee unless he brings an action, a regular litigation, and calls the parties interested. Where the parties ultimately interested beneficially are either uncertain, or, as the case may be, unborn, the court will in all likelihood give no determination upon the point; and, therefore, judgments obtained from the court as a general rule come a great deal too late for the guidance of the trustee—the thing is done. There are one or two exceptions only. There is one clause in, I think, the Act of 1867, the Trust Act (it was the second of a series of Trust Acts commencing, I think, in 1861 and ending in 1889) which enables trustees, in cases where it becomes expedient to sell, to grant feus or to excamb the whole or any portion of a landed estate, or to borrow money upon it; and the trust deed confers no power upon them to that effect, to obtain the authority of the court upon an application and due cause shown, but it is limited to those cases.

3014. That is to say, to confer authority upon them to do certain things?—Yes, to do certain

*Chairman*—continued.

acts of administration not warranted by the terms of the trust.

3015. To extend their power, but not to give them advice, that is to say?—Yes.

3016. Do you think it would be desirable to assimilate the English system by which under an originating summons trustees in England can make application to a judge in chambers?—Yes, I do. I think it would be a great advantage to trustees in Scotland to have the right to approach the court to the same extent as is enjoyed by an English trustee. At the same time, I wish to make this further remark: that looking at the nature of the question which may come before the court, it is highly desirable that the court in Scotland should, in considering such questions, sit in chambers, and not in open court. As a matter of fact, the practice of sitting *in camera* is almost unknown in the Court of Session. I do not think it can be called a sitting *in camera* in the case of children whose custody is in issue, where they sometimes have a personal interview with the child; but I think that represents nearly the whole extent of their chamber sittings, if they may be so called.

3017. On one other point I should like to know your view very much, and that is, whether you think there ought to be any relaxation of the general law regulating the liability of trustees with respect to trust estates?—A truster ought, in my opinion, to have power to relax the severity of the general rules of law relating to the personal liability of trustees for losses arising in the course of their administration. The rule in Scotland, as in England, is that in dealing with the corpus of the trust estate they must keep within the lines of investment prescribed by the law, or by the trust deed. Within those lines they are bound to act with what is termed ordinary care and prudence. If they fail to do so, honesty of intention will not protect them from the consequences. Trusters, or testators, have frequently attempted to protect their trustees against liability for honest errors in the execution of their office. These attempts have proved futile; because the courts in Scotland have held that such dispensing clauses, however strongly expressed, can give no protection against what are, in the sense of law, substantive breaches of trust. If, for example, trustees were in good faith to lend 5,000*l.* of the trust funds upon heritable security in ignorance of, or in error as to, the rule of law, which would have restricted the loan to 4,000*l.*, they would incur liability for any loss accruing from such investment, notwithstanding the dispensation of the truster. I think that in such a case the exemption provided by the truster ought to receive effect. He can sanction or even direct the employment of the trust funds in investments, which are truly speculative, as in a trading concern; and in the latter case losses incurred in honest trading fall on the beneficiaries. There appears to me to be no reason why he should not also have power to direct that should his trustee, in making a proper trust investment, commit an error which occasions ultimate loss, that loss shall, if they acted honestly, be borne by his estate. The condition is one which, in

my

*Chairman*—continued.

my opinion he might reasonably attach to the interest which he confers upon the beneficiary.

3018. You would enable the trustee to limit the liability of the trustee; but supposing that the trustee did not use any language limiting the liability of the trustee, would you enable the court to relax the rule in his favour if he had acted honestly and with reasonable care?—I have not considered that question so fully, but my present impression certainly is that it might be quite safely done. I think he must be acting within what I may call a limit; he must be making that which, if rightly made, would be a proper investment. He may lend too much, or he may take a security for more than it is worth. He may have been told by his agent that he was quite at liberty to lend up to the amount recommended by a surveyor; or he may have been told by a friend on whose legal knowledge he relies, or he may be told by a counsel that he is safe; but that will not protect him. I do not think that ought to be.

Sir *George Osborne Morgan.*

3019. From the statement that you have been good enough to make to us, I gather that the law of liability of a trustee, the law of trusts generally, is exactly the same in Scotland as it is in England?—I should think so. In point of fact, trust law in Scotland is comparatively modern. At one time what is effected by trust was effected by direct settlement of the estate. There was not much money in Scotland until the end of last century. Since then trust deeds have come very much into favour, and I think we have borrowed our whole law of the liability of trustees from English authorities. I think we have borrowed rather too much.

3020. That being so, do you see any reason whatever why this system of judicial factory, which has worked so well in Scotland, should not work equally well in England?—I do not.

3021. I suppose when the parties agree as to the appointment of a judicial factor, the same person who would be appointed a private trustee out of court is generally appointed judicial factor?—I cannot say that.

3022. A relation or friend would mostly be selected for preference, would he not?—My own impression is, and so far as my knowledge goes, it is so, that it is not usual to select a friend who would be a trustee; it is usual to select one of those persons (generally accountants or business men) who really understand these matters. Many house agents, for instance, are also judicial factors.

3023. Then, in appointing the judicial factor, the court is guided rather by considerations of the fitness of the factor than by his relation to the family?—Certainly; or guided, too, by the fact that the beneficiaries interested have confidence in the particular man.

3024. By fitness, I meant professional fitness, of course?—Yes.

3025. You have no such thing in Scotland, have you, as payment of trust funds into court?—No.

3026. Might I ask whether the Scotch judges have any official attached to their court analogous to our chief clerks attached to courts of the



*Sir George Osborne Morgan*—continued.

Chancery Division?—I do not know how to answer that question. They have a chief clerk attached, with certain duties; but I may say that the staff of clerks in attendance upon the Scottish judges is a very meagre one, as compared with the staff of an English judge. An English judge, as a single judge in Chancery, has a much larger staff than either of our divisions. The chief clerks have certain duties. One of the duties of the principal clerk is that he is custodian of bonds of caution, for which he is responsible; and he is also charged with the duty of seeing that the cautioners (sureties) are proper.

3027. But a Scotch judge does not, like a judge of our Chancery Division, after he has been sitting in court, go into chambers, and, with the assistance of the chief clerk, do administrative business there?—No.

Mr. *Greene.*

3028. Would you kindly tell me, is the judicial factor a sort of *quasi* corporation; on his death does his executor carry on the work?—No, there must be a new appointment; it is strictly personal.

3029. Is a firm appointed?—No, never; always one individual. I do not know of any case of a joint appointment; there may have been such, but I knew of none.

3030. Upon the death of a judicial factor has the property to be transferred into the name of some new appointee?—Yes, but there is, generally speaking, no transfer; it is completed by his appointment.

3031. Supposing there is stock or shares, what action would be necessary?—He would require to have them transferred.

3032. And the new judicial factor would take with him his order of court appointing him?—Yes; and that would be sufficient title.

3033. Then the judicial factor is recorded in the books of the company as being a judicial factor?—I understand so; certainly.

3034. So that they would probably not allow him to transfer without some authority of court, would they; or would they take his word?—Yes, they would allow him to transfer; he would in all probability, and I believe it is the practice where a change of investment has been sanctioned by the accountant of court, as it generally is, produce the opinion of the accountant of court. I do not say it is necessary.

3035. Are there any cases of which you have ever heard of a judicial factor who, you told us, would not be probably a friend of the family, who has either bullied or blackmailed or oppressed the beneficiaries?—I never heard of any.

3036. If there was anything like taking undue advantage of them, or of pressing them, would they have a means of redress?—They would go to the accountant of court (that is quite well understood all over Scotland) and he would present a note for the removal of the judicial factor.

*Chairman.*

3037. There would be very soon an end of that judicial factor, if it were true, would there

*Chairman*—continued.

not?—The accountant of court would simply put in a note to one of the divisions of the court praying the court to remove him and to appoint another in his stead, and that would be done at once.

Mr. *Greene.*

3038. Is there anything to prevent these judicial factors from making a profit out of the business of a trust?—They would not be allowed to charge for law business apart from the factory, even although they were lawyers.

3039. But supposing a person were to use trust money that was in his hands for a time in his own interest, instead of paying it to the beneficiaries, what would happen?—He would be removed at once.

3040. If he were detected, that is to say?—Yes.

3041. Then a judicial factor, being sole trustee, has an opportunity, at all events, of defalcating without his being stopped or prevented?—Yes, undoubtedly: but the great check upon that is that wherever the accountant of court has reason to suspect anything he can call at once for vouchers of all the investments; he can call for the production of them at once, and if that is not obeyed, and at once responded to, he calls upon him to consign the amount in bank.

3042. In Scotland, if the last of two executors dies, does his executor become a trustee?—No.

3043. Then what happens if two or three trustees die off, and the executor of the last does not become trustee; what is the legal condition of affairs; because we understand the law here to be that the executor of the last surviving trustee becomes the trustee; is that so in Scotland?—No.

3044. What happens then?—The surviving trustee can assume another trustee.

3045. But supposing that they all die off?—Then the court alone can remedy that, by either appointing new trustees or appointing a judicial factor.

3046. Then that is different from the law of England in that the executor of the last survivor does not become trustee?—Yes. In Scotland, in the case of the oldest and simplest form of trust where an estate is conveyed to A, as trustee, it was necessary at one time to make up a title through the heir of that trustee upon his death. That is all provided for now, but the trust office never descended.

3047. Then supposing it were found that the main course of dishonest defalcation arose from the fact that the last sole trustee by survivorship had the money in his hand, and could misapply it, could you suggest any means of preventing that; I do not say punishing the trustee; we have got that; but to prevent him from dishonestly misapplying the property in his hands?—I do not know of any means by which it is possible to prevent dishonesty absolutely.

3048. Could his power of dealing with it be checked or clogged in any way by requiring that he could not move or deal with the property without the order of the High Court or the judge nominating another trustee?—I have no doubt it might be effected in that way, but

Mr. *Greene*—continued.

it would be a great impediment to the administration of trusts if he could not move without that.

3049. Until the proper number of trustees was filled up again, I mean?—You see we have often to encounter a case where only one trustee is appointed.

3050. But taking a case where it is assumed by the trustee that the property should be held by at least two or three, then death has taken away two, and the last survivor gets an opportunity of having the property in his hands to defalcate, could you suggest any means by which to prevent his so misapplying it?—I have not directed my attention to that. The reason why is, that I am not aware that any such defalcation has ever arisen to begin with; it has not been a matter of practical moment; and in the second place, I think it is very unusual to permit a trust to fall off so far; that is to say, if the survivor exercises the power of assumption. Of course he cannot demit office without making application to the court; when there is a last trustee, he cannot demit office without applying to the court to fill his place.

3051. And in Scotland do they allow them to dwindle down only to one?—Yes, they may dwindle down only to one, either by death or by resignation. Any gratuitous trustee can resign at any time he chooses. Practically they do not, unless a man retires from a trust when he finds that he is unable to give attention to it.

*Chairman.*

3052. Can a trustee resign if he is also guardian of a minor?—Not if he is an officer of the court. No man can be relieved of his office, except through the intervention of the court, when he derives office from the court. I think that rule is universal.

Sir *Henry Roscoe.*

3053. With regard to the amount of security which, in Scotland, the factors have to deposit, does that amount to a security equal to the whole corpus?—No.

3054. Do you think that, if that same process were adopted in England, a greater amount of security would probably be needed than you have at present in Scotland, in order to give to the public a greater guarantee of security than they have at the present moment?—In the case of judicial factors, the amount of security required from them is generally fixed either by the court, or by the accountant of the court practically, and a great deal may depend upon the character of the estate coming into his hands. You see when once the estate has been vested in him, and property invested at the sight of the accountant of court, the judicial factor cannot dispose of it.

3055. But if it is real property, or railway shares?—Then it is practically under trust, and no person will purchase it from him without seeing the title.

3056. But under the proposal that has been made to create an official trustee of some kind in England, would not the personalty come also under his hands?—I should think so. I was assuming that everything would come under his hands.

Sir *Henry Roscoe*—continued.

hands. What I was endeavouring to point out was, that in the case of a judicial factor he is practically not free to deal with anything except rents and interests coming into his hands, and he finds security considerably beyond that.

3057. Would that be the case in England if the same thing were proposed?—It might be made the same thing.

3058. Would you be satisfied that that would be a sufficient guarantee?—I cannot speak for the English people, I am afraid. I had considerable experience of Scotch trusts for 29 years, and I have been a judge in England, but not an English judge for 14 years and 11 months now; but in the course of my judicial experience here I have seen very little of English trust law.

*Chairman.*

3059. You could, of course, have the corpus in the hands of the Paymaster General, and let the factor deal only with the income?—That might be so.

3060. In point of fact, if I understand it rightly, the amount is about 8,000,000*l.* now in the hands of judicial factors, and there has been above that sum every year increasing of late, I suppose?—It may be so.

3061. At all events a very large sum for all these 50 years, during which time there has been no loss?—I cannot speak to the amount of funds, but it has been large, and, I should think, has been increasing.

*Thursday, 4th April* 1895.

MEMBERS PRESENT:

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|---|---|
| Mr. Attorney General. | Sir Charles Pearson. |
| Dr. Farquharson. | Sir Henry Roscoe. |
| Mr. H. D. Greene. | |

MR. ATTORNEY GENERAL, IN THE CHAIR.

His Honour Judge LEA; Examined.

*Chairman.*

3062. YOU are Judge of the County Courts in Herefordshire and Shropshire, I believe?—I am.

3063. And the experience that you have is, I suppose, wholly or largely among country people?—Yes, almost entirely in country districts; I may say that I have had two districts, one in Suffolk first, and then in Shropshire and Herefordshire, and both have been country districts.

3064. And I need not say that you have, of course, become more or less familiar, even if you were not so before, with the habits and ways of life of people in those districts?—I think one learns a good deal in my position.

3065. Do you think there is much trust money lost by reason of the dishonesty of trustees?—I think there is a good deal lost; not a very great deal in proportion to the total amount of trust funds.

3066. The total amount of trust funds has been estimated by some witness here, I think, at about a hundred millions; an enormous sum is in trust?—I suppose an enormous sum, and I should think that only a very small proportion of that is ever lost.

3067. But, at the same time, those losses do bear very hardly upon people when the money is gone, and they lose the savings of a lifetime?—Yes, undoubtedly; very hardly indeed.

3068. Do you think that persons who are left in the position of sole trustee are very largely the people at fault?—I think that losses often occur when there are sole trustees, because they hardly can occur when there are not sole trustees.

3069. It would require a conscious and wicked conspiracy on the part of two, whereas in the case of one sole trustee he may yield to temptation or to necessity, or to the want of money for himself; and he has no one to check him, or no one to whom he must necessarily communicate his wicked intention?—Yes, he does not intend to be dishonest when he is left sole trustee, but pressure comes and he takes the funds for the time, intending to replace them, and the time never comes when he can replace them. I should think that is the case in nine cases out of 10.

3070. In country districts is much money invested on mortgage?—Yes, a good deal.

*Chairman*—continued.

3071. And I suppose not always very prudently invested?—No. The depreciation in land has been very great, and a great deal of money has been lost in that way. Some cases which I have heard of in my own courts, which have come before me directly and indirectly, in which very considerable sums have been lost; and there are a large number of small cases in the country where trust funds are lost partly by mortgage investments, and often by, really, ignorance of the parties in whose hands they are left, or who get hold of them.

3072. In the case of small people with small means, is it difficult to get trustees who have got the necessary experience and the necessary knowledge to be able to apply the money wisely?—I think it is very difficult for people in that position.

3073. Generally speaking, would you say that those who are in a small way of life are at a great disadvantage with regard to the creation of trusts?—Yes, I think so. I have had several cases within my own knowledge in country districts in which moneys have been lost from ignorance or from law suits, and from people not understanding what they really should do with them. I have a case at the present moment, if I may allude to it quite shortly, in which money was left and the case is nearly concluded and the trust funds are all gone. I have almost no doubt that in that case, if there had been some official person to step in and take charge of the small estate, he would with ease have divided the 100*l.* or 150*l.* amongst the persons entitled; but now I believe the last vestige of it has disappeared in bad administration and litigation.

3074. Could that be fairly regarded as a type of the cases that frequently occur?—I think there are a considerable number of those cases, and probably a great many more than come to my knowledge.

3075. What do you say in regard to restraining or limiting the powers of a sole trustee to act when he becomes sole trustee by survivorship, for example, or by the retirement of other trustees?—I think, on principle, it would be a very good thing if it could be done; but I have at present always seen very great difficulties in doing it satisfactorily; that is to say, in doing it in

*Chairman*—continued.

in such a way that it would not do more harm than good.

3076. In the case of property; take real estate, for example, which had been vested in two trustees, and one of them dies and the other becomes the owner by survivorship; I suppose it is not always easy for persons dealing with that surviving trustee to know whether, in fact, he is a trustee or not. That is not necessarily always known, is it?—On the contrary, I believe the trust is never disclosed; they carefully avoid disclosing the trust, for fear of giving the purchaser notice of it.

3077. Of course, if the purchaser had notice of the trust he would be bound by the existing law to inquire?—He would be bound by the existing law to inquire, and therefore notice of the fact is carefully kept from him.

3078. Can you suggest any method by which it should be imperative that notice should be given to the purchaser. You could enact it, but it would be difficult to enforce it, I suppose, in a case of that kind?—I think that the purchaser, and everybody in that position, would very much object to have notice. I think it would make the transfer of property exceedingly difficult, and almost impossible. If you take the case of a railway debenture, where there are two trustees, and one dies, and possibly the other dies, and leaves a sole executor, he alone has the legal right to transfer that debenture, and the company knows nothing. I think you will find that the companies always refuse to take any notice of trusts; because if they did not they would be involved in immense difficulties.

3079. I was dealing, first, with the case of real property. In the case of real property, you might require by law that the trustee should give notice that he was the trustee; but it would be difficult to compel him to do so if he chose to break the law, would it not?—Quite so; it would be merely a breach of trust; and if he was willing to commit one breach of trust by misappropriating the money derived from the sale of property, he would certainly be willing to commit a second breach of trust by not giving notice.

3080. And now with regard to the cases that you were referring to; for example, debentures or stock, of which the surviving trustee, being the registered holder in the books of the company, would be the legal owner and have it at his disposal, do you think that it would be very difficult to insist upon the company investigating the true character of the title possessed by any one who was the legal owner on their book?—I think it would be very difficult, and the opposition of the companies to being put in such a position would be enormous.

3081. There was a clause which was understood to have an operation of an analogous kind, in the Finance Bill of last year. I do not know whether you recollect it?—I do not.

3082. But you would agree with what was said at that time, that it would be most unsafe, for commercial reasons, to impose any further duty upon companies in regard to the transfer of stock?—I do certainly agree in that view.

3083. Because it would interfere with the realisation and transfer of property?—Yes, I think so, and to an extent which would hardly be justified, I venture to think.

*Chairman*—continued.

3084. In that case, also, it would be very difficult, it would be impossible, in fact, would it not, to affirm that the fund which came into the hands of a sole holder by the death of someone else was trust money, it might be partnership money, for example, and necessarily required for the purpose of carrying on the business of the partner?—Yes. No doubt, as a rule, such money as becomes vested in a survivor is trust money, but the companies who transfer it do not know that.

3085. It may not be trust money at all?—Yes, it may not be trust money at all. There are many cases where two brothers own property jointly.

3086. You would be willing, if you could see your way, to impose some obligations which should prevent the sole trustee from being uncontrolled; but your difficulty seems to be the practical difficulty in finding an available method of doing that?—Yes, and I think if an available method were found, it would also be found that that method entailed considerable expense on the beneficiaries, which they would not like.

3087. Now what do you think of giving facilities for some public official, whether a judicial officer or an administrative officer?—That I should be in favour of. I should like very much to see a public trustee appointed; I cannot say with any certainty that it would succeed, because I think the system of private trusts is so rooted in the country that so long as people can get private trustees they would prefer to have them; but I think there are many cases where people cannot get private trustees, especially in the poorer class of cases, where they have not got friends, or friends with knowledge of business, where a public trustee might be very useful.

3088. Do you think there would be any danger of a system commenced upon a voluntary basis, which I understand you approve, being converted for financial reasons into a compulsory system?—I should venture to think none. I do not myself think for a moment that the people of this country are prepared for a compulsory system, and I should think there would be no danger whatever of such a thing.

3089. We have been told of the analogy of the Land Transfer Act, which it is said has been a failure, although there has been an expensive office established; what do you think about the causes of the failure of the Land Transfer Act of 1891, have you thought about that?—I have often thought about it, and I may say that I have on two or three occasions had cases to advise as to how to get off the land transfer, from a few people that have been on. Why that system has failed I find it difficult to say; but that it has failed I think there is no doubt.

3090. I suppose one reason would be the existence of old titles and the old custom of not disclosing titles in this country, which might prevent it from being successful here, although a similar and much more elaborate system is thoroughly successful in many British colonies?—Yes. I think, so far as that is concerned, people are very fond of taking their deeds to bankers to borrow money upon them, and they

*Chairman*—continued.

cannot do that where land is in the Land Transfer Office.

3091. They prefer secrecy in their transactions?—Yes, they prefer secrecy, and they prefer informal transactions of that kind to the more formal transactions of land transfer.

3092. It has been suggested that the solicitors do not look with favour on the Land Transfer Act; I do not know whether you think it is so?—I should think as a rule, it is so, though I have known solicitors, in two or three cases, put estates on the Land Transfer Office, where a desire has been expressed for this.

3093. In point of fact, nearly everybody in this country does act upon the advice of his solicitor?—Yes, everybody. A few strong people say, "I am going to have my estate put upon the Land Transfer"; and if they say that, it is done.

3094. What would you say as to the mode in which some official or public trustee should be appointed; do you think it ought to be an administrative and separate office, or that it ought to be worked, as in the case of Scotland, through the Courts of Justice, the High Court in London, and the County Courts in the country?—I am inclined to think that it should be a separate office, with somebody at the head of it, and with branch offices all over the country. I think that is a necessity for it; not branch offices with special heads, newly-appointed heads to each; but that the heads of the branch offices must be some existing officials.

3095. You would engraft it upon some existing system?—I think it must be so, because, otherwise, the expense of starting what might not succeed would be too much.

3096. The Lord Chancellor, when he was here, told us that he thought that the district registrars would be a good body to entrust with work of this kind; do you think that would be so?—I have attempted to think the matter over, and I only know of three bodies who could be entrusted with it; there may be others, but I do not know of them. Those three bodies are the registrars of county courts, and I think they are too numerous, and may be put aside at once; the other two bodies are the Official Receivers in Bankruptcy, and the District Registrars. Now the Official Receivers in Bankruptcy have managed their work exceedingly well, I think, and to the satisfaction of the public; and if they were to be administrators as well as depositories of trust funds they would perhaps be the better class of men, because they are accustomed to realise estates; but I think the fact of their name would be against them; they have a great deal to do already; and, on the whole, I have distinctly come to the conclusion in my own mind that the most satisfactory persons would be the District Registrars of the High Court.

3097. You agree with the Lord Chancellor in that view?—I venture to do so.

3098. Would you think that a district registrar in the country should be under the direction of the High Court?—I should think that he would rather be under the direction of the public trustee in London, so far as he required direction; and I have no doubt his accounts would be audited. In the first place, he would be in an official position, a recognised man in the country of considerable position; then he would have his accounts audited as his accounts are now, for he is himself in most places registrar of the county court in that place, and his accounts are strictly and regularly audited, and his shares and securities and stock could be sent up to London, if it was thought necessary, and deposited there; and with such security as that I do not think there would be any danger of losing the money. And I think there is another advantage. If there were only a Public Trustee in London I do not think country people would have much to do with it; but if they could go and see some official whom they knew and consult him, and ask where their trust funds were, I think they would be likely to make use of him. Country people do not like writing letters, and they do not like communicating with an official in London about their small matters.

*Chairman*—continued.

3099. You think it ought to be somebody accessible, and who would not be bound entirely in red tape, but would be willing to talk things over with the beneficiaries and with the settlors, or indeed with anybody concerned?—I think that is exactly it; and I think the High Court Registrars would, as a rule, answer that purpose.

3100. Are they, as a rule, practising solicitors?—Some of them are; but I think, as a rule, they are not.

3101. They confine themselves to the duties of the district registrars and county court registrars?—Yes, and perhaps they have some other public office; but I think as a rule they do not practice, though some I know do.

3102. You would not think it desirable or preferable to have a person engaged in business himself; or would you prefer that the public trustee in the locality should be a man engaged in practice as a solicitor or accountant?—I think it would be better that he should not be a solicitor, though I do not think that would be an absolute bar. I think that one advantage of the district registrar would be that in the realisation of estates he should employ the solicitors in the town.

3103. You think that he should be able to employ solicitors if necessary?—I do.

3104. Under the check that he would not be allowed the cost of employing a solicitor unless it was found to be a proper expenditure upon audit?—Quite so; but I think in the realisation of estates he would be almost compelled to employ solicitors, and I think if he did so, it would remove a good deal of opposition to the scheme.

3105. We have had evidence before us of the very remarkable system that prevails in Scotland. I do not know whether you have followed the evidence that has been given before the Committee?—I have, so far as I have been able to get it; I have not been able to get all of it.

3106. There is in Scotland a system of judicial factory, and if you will allow me to state in a few sentences what it is, perhaps that will assist you. It is a system by which, in the case practically of any trust, whether in the nature of a testamentary trust or a settled trust, the court deputes the duty of managing and realising the estate to a person who is not an official at all, mostly

*Chairman*—continued.

mostly to an accountant, and generally upon the recommendation of the family concerned. A small charge is made varying from 1 to 3 per cent. upon the annual income of the trust estate, and the accounts are rigorously audited once a year. This system has been extended to sheriff courts, which are the counterparts of county courts in England; so that it is available to everybody in every district of Scotland. They have a sum now of upwards of eight millions in the hands of the judicial factors, and in their sole custody; and for 50 years there has never been the loss of a shilling to any *cestui que* trust under the system, and the expenditure seems to be very small indeed. Do you think that we could, in England, adapt our High Court and our county courts to any such system as that?—I should think it would be quite possible to do it. I see no great difficulty in doing it, and it would be a very good plan. But I should like to ask one thing which I do not know about that. Do the judicial factors give security?

3107. Yes, they do; they give two good sureties?—Then that very much adds to the strength of the system. I am not sure, even so, that I should prefer it to an official trustee; because, after all, the judicial factor is a person known to the family, but he is not publicly known, and he might dispose of the funds, and the sureties might not be of value.

3108. It has been stated that it would be possible, and were it necessary would no doubt be done in Scotland, to require the fund to be paid into the accountant of court; but in fact it has never been required. You think it would be desirable, probably, to give confidence, that the funds themselves, while being administered by the public trustee, should be under the custody of the court itself, or in the custody of a public trustee, not of a local manager?—Yes. Supposing that any of those trust funds were lost, would there be any responsibility upon anybody to replace them?

3109. The only responsibility in the Scotch system would be through the sureties?—There would be no responsibility upon the Government, or anyone, to replace the money.

3110. No responsibility, my honourable friend on my left says, upon the Government?—It has seemed to me that if a judicial factor is appointed by the court, then the court does assume a certain amount of responsibility. If the trustees are appointed at the wishes of the parties, we know that the responsibility rests with the parties.

3111. Then if there was to be responsibility on the part of the State, you would, I suppose, desire that the funds should be under the control of the State, in the custody of the State?—Yes, I think so in that case; but if not, and if people in their option wished to appoint a judicial factor of that character, I do not see any objection to the plan; it might be very desirable.

3112. That point of the custody of the funds is not a necessity in dealing with the system in Scotland, and it could be very easily altered if necessary; but apart from that, the point about which I was wishing to get your view mainly was, what should be the relation between the



*Chairman*—continued.

courts of justice and any public trustee that was to be appointed. Do you think that the public trustee should merely be amenable to the courts like any other citizen, or do you think that he ought to be an officer of the court, so as to be under the directions and control of the court if it was thought necessary?—I think on that point distinctly that it would be better that he should not be under the control of the court in that case, but should be able to come to the court for directions when he required them. I think if he were under the control of the court we should have established another Chancery system with a good deal of red tape, and that the expense would be so considerable that there would be very little benefit in the arrangement.

3113. There are at present some arrangements existing by which public officials are brought into special relation to the courts of justice, as, for example, the official receiver in bankruptcy. I do not know if you exercise bankruptcy jurisdiction?—Yes, in four courts.

3114. And you have, of course, in that capacity to deal with the official receiver?—Yes.

3115. And he occupies, as we know, a certain special relation to the court, being an officer of the court?—Yes, quite so.

3116. And subject to your orders and directions?—Yes; and, if I may venture to say so, I think that the relationship is an excellent one. I see a good deal of the official receivers, I have two in my district, and we are on excellent terms. If either of them has occasion to ask a second opinion upon any matter upon which he does not feel confident it is frequently asked in private, and if he has occasion to make any application to the court he makes it always with the greatest ease. I think the relationship between the county court judges and the official receivers is, so far as I know, a useful one. And it would be the same thing with the district registrars of the High Court; they would be in the same relationship to the judge; they would be able to ask his suggestions or opinions whenever they wanted to do so, and, if the matter required it, they could bring it personally to the court.

3117. Then you think that the official trustee or public trustee ought to be in a parallel relation to the court with the official receivers; am I rightly interpreting your view?—That is so.

3118. I may tell you what has been in my mind in order that you may try and help me. It seems to me that it would give great confidence, and be very valuable, if, without expense and without red tape, such a person as a judge of the High Court in London, or a county court judge in the country, was known to be in supreme control; do you think that that could be done by rules which should enable the official trustee or public trustee to ask the directions of the judge, or consult him or ask his opinion?—Yes, I think that might be done very well; it is done already; I do not know quite under what rules, but it is done by the official receivers, and I cannot see any reason why it should not be done by a person in the position of a country trustee. I do not know how it is done in London; I do not know what access the official

*Chairman*—continued.

receivers have to the High Court judges, but in country districts it is done every day.

3119. The system really works very smoothly in the country, as I understand, not only in your own experience, but, so far as you know, in other people's experience?—Yes; and I have heard a good deal to that effect.

3120. It undoubtedly would impart to the judicial position something of an administrative character; but in point of fact you have a good deal of administration as county court judge in bankruptcy, have you not?—Yes, except that the administrative part of it does not usually come before the judge. We see the working of it when a case comes on, but we do not share in the administrative part of it.

3121. Except when you think proper to interpose?—Yes, but I think we should never do so unless we were asked, because we should not know about it.

3122. But you have the control if you think fit; if you think a wrong thing is being done you could check it?—Yes, if we hear of it.

3123. In point of fact, what you say would really approximate very nearly to the system of judicial factory in Scotland, with this difference, however, that you would rather have an official person as trustee than appoint separate people outside?—I think that is so; so far as I have been able to consider the matter, I think that is so. I do not quite see why the two systems should not be allowed to run side by side and see which the public prefer.

3124. I was just going to make that my question; you would be inclined to make it optional in each case?—Yes, I think the public, as a rule and in the end, find out what is best for them.

3125. If you were to attach these duties to an existing official it might be done without really any considerable expense, might it not?—I should think it could be done quite reasonably; and that is an advantage of an official person over a public trustee in the locality. A public trustee would want a salary, but an official person would merely want fees in the nature of percentages. If there was much work he would get more fees; if there was little work he would only get small fees. There would be very little extra expense in the official trustee.

3126. Would you apply this system, or some kindred system, as well to the cases of executories and intestacies as to the cases, say, of marriage settlements or other trusts of that character?—Yes, I see that a suggestion has been made that in cases of small intestacies the property should vest in the official trustee, and from my small experience I think that that would save the persons interested a great deal of money; I think that is a valuable suggestion. I hardly venture to suggest a limit to the amount, but it should not be probably in large cases, and I also think that people would feel themselves oppressed unless they had the option. If after the property had vested in the official trustee the next of kin could still take out letters of administration, then they would feel that there was no hardship; and I think that the estate would in the majority of cases remain in the official trustee. In bankruptcy the estate of a bankrupt vests in

*Chairman*—continued.

the official receiver, but a trustee may be appointed if the creditors wish. I think if they could not appoint an administrator they would think it a hardship. If they take out letters of administration then, in small estates at all events, I think they would rarely do so.

3127. There are provisions, one knows, by means of which, under the existing law, for a very small sum of money (not very many shillings), the State itself grants probate; you would be disposed to allow the official or public trustee to procure probate and carry out the distribution of an estate in cases where it was desired that he should do so, for quite a small sum of money, I suppose; quite a small commission?—Yes, I think that would be paid by fees in the form of percentages again. I think the suggestion was that in small estates it should vest in the official trustee at once.

3128. But you would reserve the option?—I would reserve the option to the parties to take out administration if they chose. If not, the public trustee would have to do it, and pay the usual probate fees.

Mr. *Greene.*

3129. You mean the party who, by law now, would take it out?—Yes.

3130. The next of kin, or creditors?—Yes.

Sir *Charles Pearson.*

3131. How are the district registrars paid at the present moment; by salary?—No, I think by fees; they are usually registrars of the county court as well, and there, of course, they are paid by fees, or at least they are paid by a very elaborate system; so much certain, and the rest by fees.

3132. Are they allowed to conduct other business, or is their whole time paid for?—In many cases, in the larger districts, their whole time is paid for, and they conduct no other business, but in small places they do.

3133. But it would be the larger districts that you are pointing to, I suppose, as those whose registrars would come in under your scheme?—No, they would come in in all cases where there are district registrars of the High Court.

3134. Whether large or small?—Whether large or small. There are 85 district registrars, and the registrars of the county courts altogether must be between 500 and 600, I should think.

3135. And it is only the former that you point to?—Yes, it is only the former that I point to. They are in the principal towns.

3136. Am I right in supposing that their hands are pretty full already, that is to say, that they are pretty well occupied?—No. I cannot say but that it may be so in large towns; but in such districts as I am more acquainted with, the two towns of Shrewsbury and Hereford, that have district registrars of the High Court within my district, I do not think they are overburdened with work.

3137. You think that this would not place an undue burden upon them?—No.

3138. They

*Chairman.*

3138. They would have to get assistance, if necessary?—Yes, in large places they would very likely require assistance.

Sir *Charles Pearson.*

3139. In your scheme, do you regard them as vested with any power to administer, or merely taking the place of custodians of the fund, or transmitters of it to London. What powers would they have to do acts of administration?—I think they might have powers of administration vested in them; but I think that in that case they should be able to employ a solicitor to assist them.

3140. And who would they refer to in case of difficulty; to which court?—They would refer to the county court judge, so far as the county court judge has jurisdiction; and, where he had no jurisdiction, to the Court of Chancery.

*Chairman.*

3141. Upon that point that has been put to you, which is rather important, would you be disposed to increase the jurisdiction in order to enable advice or directions to be given by the county court judge in these cases?—I think I should be disposed to do that. I do not know what confidence the public have in the county court judges, but I should be disposed to do it to a certain amount. If I may add one word on that, I do not think that in contested cases and witness actions, where it depends on evidence, there would be any harm done if the jurisdiction of the county court judges was increased; but there is one class of cases in which I very much doubt their competence, and that is, the construction of wills, deeds, and documents, of which the chancery judges have altogether greater experience.

Sir *Charles Pearson.*

3142. Have you considered whether such applications to the local courts by the registrars would be at their own hand, or only after consultation with and sanction by the official in London?—I think they should be on their own motion quite, so as to avoid as much officialism as possible.

3143. You spoke of the risk which funds run when they come into the possession of a sole surviving trustee; have you considered whether that might be mitigated if it were provided that when funds do come to vest in a sole surviving trustee, that trustee should, *ipso facto*, come under the supervision of your public official, at all events, for the purposes of rendering accounts annually and submitting to a yearly audit?—Who is to bring him, supposing he does not come?

3144. By *ipso facto*, I mean that he would thenceforward have notice that he was under the supervision of the public official, and he would go on at his own peril from that moment?—Quite so; and that would affect the honest trustee, and he would give notice at once; but the person who was not an honest trustee, or who had any idea of making use of the funds for himself would simply commit a second breach of trust by omitting to give notice.

Sir *Charles Pearson*—continued.

3145. Then that could only be done on an application by some one interested?—Yes; my experience of beneficiaries is that they leave matters almost entirely in the hands of their trustees, and do not take action.

Dr. *Farquharson.*

3146. I think you said that you did not think that there were a great number of cases of defalcation in proportion to the amount of money invested in trusts?—No, I think the majority of trusts are very honestly conducted.

3147. Do you speak from your own experience or from general considerations as to that?—I have a great deal of experience of trust matters myself, and of course one hears all about what is done. I think that large trusts are, as a rule, more carefully conducted and more easy to manage than small ones.

3148. Do those kind of cases come under your jurisdiction?—I have to deal with those cases in small matters.

3149. Do you think that there are a large number or any considerable number of cases of defalcation which are hushed up and not brought before the public prominently?—I think a great many, but not a great many in proportion to the total number of trusts; and a greater number in proportion in small estates.

3150. Do you think there is a great or increasing disinclination on the part of private people to act as trustees, to take up the duties of trustees?—I know that there is a great disinclination on the part of private people to do that, but they are compelled by circumstances to do it. No one likes to refuse a relation; it is almost a duty to take up the position of trustee for anybody who is a relation; and it is very difficult to escape when friends ask and press it. I have myself refused many times, and on a second or third request have given way.

3151. And is the disinclination because of the trouble or because of the danger?—Both, but I think it is the trouble chiefly.

3152. Not the danger?—The danger comes in as well, and it certainly is a consideration; but the trouble and burden of it is very heavy indeed, as I am sure you know better than I.

*Chairman.*

3153. We have all felt it, I am sure?—I am sure everybody has felt it.

Dr. *Farquharson.*

3154. Would you be in favour of any relaxation of the law with regard to the responsibility of trustees. We have been told by some eminent authorities that they think the law as administered presses rather hardly upon trustees?—I am very glad to see that those very eminent authorities are taking that view. I think that the law might very well be mitigated so far as honest trustees are concerned; but at the same time the difficulty of dealing with a dishonest or very negligent trustee is very great.

3155. Have you any other reason besides those two reasons for proposing the appointment of this public official; that is to say, beyond the disinclination of trustees to act, and the occasional danger of misappropriation of funds?—Yes;

Dr. *Farquharson*—continued.

—Yes; I think my great reason would be to try and save the trust funds, especially of small estates, for people for whom they were intended either by will or by law. That I think would be the chief reason for appointing a public trustee.

3156. But you have just expressed the opinion that there is not much defalcation, and that those cases are very rare?—I do not think I went so far as to say that they were very rare; I think I only said that they were rare in proportion to the total number; and that I think they are much more numerous in small estates than in large estates, though they never come to light.

3157. Did I rightly understand you to suggest that the public trustee should be the sole trustee, or that he should act under any combination of circumstances with the private trustee; in other words, is he merely to be the custodian of the corpus, or is he to have any jurisdiction over the way in which that money is administered?—I think that might be left optional; I think in both cases it would be valuable. He might either be a sole trustee and look after the funds, or he might be associated with private trustees, he being, as you say, a depository, and they the people who manage the income.

3158. Do you think that there would be any drawback in this proposal of an official trustee from the point of view of expense or of delay. Those two difficulties have been put prominently before us by opponents of the scheme?—I have no doubt that there will be some expense and some delay; but you must pay some price for security; and I am inclined to think that in many cases it would be worth the amount paid in the form of expense and delay. I do not think the expense would be very great.

3159. It would be purely a voluntary process applying to him, so that I suppose they would know beforehand what the expense would be?—Exactly, I think it must be voluntary.

3160. There was one other suggestion, made I think by Mr. Cozens Hardy, which was to take advantage of another existing machinery for this purpose, namely, the machinery of the Paymaster General; has that occurred to you as a likely idea?—Yes, I have seen it; but I do not quite understand how that is different from the employment of the Paymaster General now through the Court of Chancery. I do not know what the difference would be.

*Chairman.*

3161. The Paymaster General, according to Mr. Cozens Hardy, was to be merely the bank in which the funds would be kept?—So I understood.

Dr. *Farquharson.*

3162. But you think, on the whole, that it would be more convenient, and probably cheaper, to adapt some existing institution rather than to start some new public department?—Yes. I almost think there must be a Public Trustee in London at the head of it; and I think all the rest of the public trustees should be existing officials, unless, of course, it was thought wise to adopt the system of judicial factors, in which case the Public Trustee in London would be unnecessary.

Dr. *Farquharson*—continued.

3163. Would the Public Trustee have at his back the Public Exchequer to protect the corpus?—I should think he would not. I should think he would rely upon the investments; but probably the Public Exchequer would have to be responsible for some loss.

3164. But supposing the Public Trustee made defalcation; after all, he is a human being and might appropriate or abscond; then who is to check him in that respect?—Of course, the one central Public Trustee would be a man of very high position, and his accounts would be subject to audit; and there would be so many people associated with him that I should think any defalcation on his part would be almost impossible.

3165. My honourable friend, Sir Henry Roscoe, suggests that I might ask you whether the Government stands at the back of the Paymaster General who is responsible for very large sums of money; has he the financial credit of the Public Exchequer behind him?—I think so, but I am not able to answer with certainty.

Mr. *Greene.*

3166. I do not know whether you have been asked yet your view with reference to companies being employed for the purpose of acting as an officially appointed trustee, or for the purpose of acting as a nominated trustee?—I would not oppose that, but I would not do very much to encourage it. I think that those companies almost always unite other business with the business of trustee and executor; and I think that although they would keep the accounts of each trust separate, they would have the money under their control, and if a time of pinch came in their other business, those funds might disappear. I do not think it is a desirable thing, although I would not altogether oppose it.

3167. And such companies could hardly fill the post which the learned Attorney General has suggested, being nominated by the court; it is the individual you want to get under the direction of the High Court or the County Court?—Yes, I think so; besides the companies would not have much influence over, or access to country districts, they could only act in the large towns.

3168. So, assuming the learned Attorney General's suggestion to be carried out of nominating judicial trustees, we will say, that would be exclusive of companies; it would require individuals to the exclusion of companies?—I should think so.

3169. Now you mentioned that there were three bodies in the counties; do you see any objection to appointing the under-sheriff to act as judicial trustee; he has a great range of business, you see, in realising estates under sale, and so on, and he is a pretty nearly permanent official?—I think there would be the difficulty, would there not, that the under-sheriff is appointed by the sheriff; and, although very frequently the sheriffs appoint the same under-sheriff, I believe they do not always do so.

3170. And you think that continuity is necessary?—Yes, I think so; I think it would be a great mistake to break it.

3171. Then

Mr. *Greene*—continued.

3171. Then that certainly exhausts all the public officials of the county?—Yes.

3172. Do you hear any complaints of realisation by official receivers of real estate or property on mortgage?—I have heard a few complaints within the last day or two, but so far as I know anything about such complaints, I believe them to be quite unjustified.

3173. Is not there frequently a suggestion made that the official receivers favour friendly auctioneers' accountants and estate agents in the way of putting business in their hands in realising estates; have you heard that?—They would have power to do so, but I have not heard it.

3174. Then, if there were a judicial trustee appointed, I presume you would provide that the beneficiaries should have access to the judge, or to someone to whom they could complain either of harshness or want of judgment on the part of this official trustee in realising the estates?—I think the beneficiaries have always had the right to appeal to the judge, whether of the High Court or of the county court.

3175. The time that may be selected for the sale of the properties, and the terms and conditions as to the sale, and so on, under which the sales may take place, are all matters that may affect the value of the estate, and the beneficiaries might not like the view taken by the judicial trustee; would you give them a chance of getting a judge's opinion to correct the proposals of the judicial trustee?—Yes, I think I would give them the chance; but you must remember that, if you do, that you increase the expense; I think I would give them the chance, but I think it would rarely be made use of. They would, as a rule, go to the official trustee, and ask him to take the other course; and it would be only when there was an obstinate division of opinion that they would come to the judge.

3176. But you have not, in experience, found either from creditors or from committees on liquidation and otherwise, that there has been supineness or inability shown by the official receiver in realising?—No, I have not myself. I have always understood that the public were satisfied with the work done by the official receivers.

3177. Do you think that the law ought to be altered with reference to breaches of trust, and the criminal law strengthened; at present where there is an express trust not in writing there is difficulty in effecting a criminal prosecution?—So far as I am competent to give an opinion on that large subject, I think the law should be strengthened.

3178. In the direction of making it penal for a person who is trustee, though not under a written trust, to misappropriate in any way?—Yes, I think that if a man really misappropriates money he ought to be punished, and punished severely.

3179. Irrespective of the mode of his appointment?—Yes, I think so.

3180. Now then with reference to this sole surviving trustee; can you suggest no way of forcing the filling up of the trustees when they have become reduced by death or resignation?—I find great difficulty in doing that; I see the advantages of it, but it is the forcing that is the difficulty. I think, as a rule, they would not be compelled, and I doubt if "forcing" is a very useful word, because I should think that 99 trustees out of 100 would be delighted to have a second trustee appointed. It is not they who make the objection; it is the beneficiaries who object on the ground of expense.

3181. But could not the expense be reduced in some way?—I am afriad not; deeds must be prepared or applications to the court must be made, and that on small estates of 500*l.*, 1,000*l.*, or 1,200*l.*, amounts up to such a sum that the beneficiaries do not like to incur it. In the case of a small trust where there is only perhaps one fund of, say, 900*l.* or 1,000*l.*, I doubt if the appointment of a new trustee would be done under 20*l.*

3182. Suppose that there were allotted to the courts something, in the way the learned Attorney General has suggested, of public officials who could be nominated, that would avoid the appointment by deed of a fresh trustee, would it not?—Yes, the public official would always remain there, and one great advantage would be that there would be no appointment of new trustees.

3183. His appointment would be an appointment *ad hoc* for that particular trust?—His appointment would be an appointment *ad hoc* for that particular trust, with the result that so long as the trust lasted his successors would take it up as he left it.

3184. With regard to the sole surviving trustee several proposals have been made; one is that when the sole surviving trustee dies the trust should not pass on to his executors; what would you think of that?—Then to whom is it to pass; to whom is the legal ownership of the property to pass?

3185. Might not the trustee law be altered by requiring that in such a case as that the legal estate should pass at once to the official nominated by the court, until the parties chose to replace him by a trustee of their own choice?—Then you disclose to the public companies and mortgagors that it is trust property.

3186. But the law could also be altered by saying that all they have to do is to see that they have a discharge from the individual; they need not look to the fulfilment of the trust, if you so alter the law?—Then in that case the individual sells the property and receives the money, and is in a position at once to use it for his own purposes.

3187. But he is an official; you have his security on the one hand, and the control of the Court over him, on the other?—Yes, but how are you to get the property out of the executor, the surviving trustee in the first instance; he must be the party to sell.

3188. No, why should it not be vested at once in an official of the Court; in the case of an intestate, it is vested in Sir Francis Jeune; in the case of the death of the last surviving trustee I ask, why should it not then *ipso facto* on his death vest in an official?—The companies and the mortgagors do not know whether it is trust property or not, and they decline to know, and so they would pay it out to the executor.

Mr. *Greene*—continued.

3189. But a stop could be put upon that, could it not, by a provision that in the case of all persons in whose names the property stood dying, some one armed with authority should come and have it put into his name?—That seems to me the best suggestion that I have ever heard made, that is a new suggestion to me, but I think that even that would impose difficulties on the alienation of property which public companies would not like.

3190. I suggest to you that a public company, so long as it does not have to look to the application of the money or see that the person charged with the trust is performing it, is perfectly indifferent whether it is trust or beneficially owned?—Yes.

3191. It cannot matter to the London and South Western Railway Company, for instance, whether the sole surviving owner is trustee, or whether he is beneficially entitled, if his discharge will be sufficient?—No, I think that provision would meet the case of a company; it would only give a little more trouble to the surviving trustee, and a little more expense to the beneficiaries, I admit that it would not be very great.

3192. But it would prevent the executor of the sole survivor from dealing with it. He may be a stranger to all the beneficiaries, and not interested in the least in the discharge of the trust?—It would.

3193. And then in the books of the company it might simply be the official receiver of the Herefordshire County Court, or what not. Then, all that the company would have to do, would be to see that they got the single receipt of the official receiver?—I thought you meant that there would have to be a double receipt of the executor and the official receiver.

3194. If by Statute it is provided that the single receipt is sufficient, that would be enough for them, would it not?—Yes.

3195. So that my proposal is, slightly to modify the general law, so as to enable this clog on the power of the sole surviving trustee to be effected?—The only objection I see to that proposal at present is, that it would give a little more expense to the beneficiaries, as it would necessitate the getting of the money out of the official hands into which it had gone.

3196. But to counteract that they would get greater security?—Yes.

3197. Would you see any objection to requiring that the last surviving owner of several joint tenants should make a declaration, if need be, on the sale of the property, or the transfer of the property, stating that he is, or he is not, beneficially entitled. If he says that he is a trustee, the purchaser or transferee must require a second name; if he says on his statutory declaration that he is beneficially entitled, then that should be sufficient for the purchaser?—I should only be afraid that it would lead to complications.

3198. The reason why I suggest that is this: you have told us that the sole surviving trustee, as a rule, at least I understood you so to say, starts honestly, that he drifts into misapplication of the funds; if so, I venture to suggest that the way to deal with him is to prevent him while he is honest, to deal with him while he is honest, before temptation has arisen to him, and make him then call in a second person, or fill up the number of the trust?—Yes, that is often the case; he is honest to start with, and drifts into dishonesty through pressure; and if he had made a declaration of that kind it might prevent him, provided that the persons who were paying the money had only to get two receipts and were not in any way responsible for the trust.

3199. I am conceding that: that they ought not to be held resposible for the regulation of the trust, but that they merely had to see that the identity of the individual is made out who is the receiver of the money?—That would practically resolve itself into this, that either two trustees must be appointed, or the trust funds must thenceforth be administered under the Court.

3200. Temporarily or permanently?—Temporarily or permanently under the Court; and that would involve an expense which I think the beneficiaries would object to.

3201. Do you see any objection to providing by the general law that where a company or individual has to pay over income to some other person than the persons standing in the books as owners should notify before any change of capital takes place to the recipient of the income, that such a change is contemplated. Take the case of consols standing in the books of the bank in the name of A.B., and the income or dividend warrant sent to C., why should not C. be informed that A. and B. propose to transfer it?—I see no reason at all why it should not be so. It would be merely one more notice sent out by the bank. I think that is a very good idea. Most of us I daresay hold consols in that way, the income of which we never see anything of, and we might transfer them to-morrow. I think that would be a very good provision.

3202. Your courts are mainly in rural districts are they not?—Yes.

3203. Have you got any notion of the number of trusts existing in the district?—No, it is quite impossible to say the number. I see some, and I see some that are badly administered, and I expect there are a great many more, but it is impossible to give any number.

3204. In small places do you find in local transactions, purchase and sale of property, and so on, that there are trusts existing for the benefit of a man's widow for life which is the ordinary trust in connection with small houses and properties in the country?—Yes, certainly a fair number, but I think it is impossible to give any idea of the number or proportion.

3205. Judge Chalmers told us that there is a great difference between the county courts; that in the big courts the judge is constantly in attendance, but that in the small courts the judge sometimes may not attend for a very long time; and he thought, therefore, that it would not do on that ground to give a trust jurisdiction, such as is contemplated, to the county courts. Do you agree with him; do you think that your absence from your district for a long time together might impede the use of county courts in the way suggested by the learned Attorney General?—

Mr. *Greene*—continued.

General?—I cannot say that I think it would, because the proposal is that the official trustees should be the district registrars, and they are the registrars of the principal county courts. In my district they are at Shrewsbury and Hereford only. I sit in Shrewsbury and Hereford at least once a month, if not oftener, and I do not think that would really be any impediment.

3206. But they would have to wait for your coming round once a month to settle any small matter about which the beneficiaries might be troubled in their minds?—But matters of that kind do not generally require great haste.

3207. Would you leave anything to be done by the registrars of county courts in the way of administration?—I think the district registrars, as a rule, would do the work, because they would be the public trustees.

3208. I was rather thinking whether the registrar at Shrewsbury, who is your district registrar, could, to save expense, act in a Bishop's Castle matter or a Ludlow matter for the registrar of one of those two courts?—I do not think that would be necessary, because any trust matter in the Bishop's Castle district would be brought to Shrewsbury, and it would be done in the court there.

3209. Let me give you this illustration: I will assume the case of a small freehold in the Bishop's Castle district that might have to be managed or inspected by the registrar of the Shrewsbury County Court from time to time as to repairs, sale or letting, or what not; the expense of his journey and the time taken up might be very considerable, might it not; his journey would cost 10*s.* or 12*s.* alone?—Yes.

3210. It would be cheaper, would it not, for the registrar of Bishop's Castle to have allotted to him the discharge of that particular trust?—Then, if so, he should be made a deputy for the time being. Perhaps I may say that I do not think it would be advantageous that the public trustee should hold more real estates than is absolutely necessary.

3211. But in many of the trusts, in small places, at least, I am only speaking of that particular locality, many of the houses, small cottages, and small farms are held in trusts, and the beneficiaries expect to enjoy the use of those premises?—Yes, but that is not the class of case in which I think a public trustee would be most useful, because the management and repairs of that kind of property would be costly and difficult.

3212. I can only speak from my own personal acquaintance down there; that there

Mr. *Greene*—continued.

are scores of them; almost every little cottage is left to a trustee for a widow, and then to be divided?—Yes.

3213. But you do not think, then, that with small real estate even the judicial factory scheme as proposed by the learned Attorney General would work?—I think that the judicial factory system would be very superior to the other in that particular class of case, because one of the family would have control of the property and would look after the repairs.

3214. To be appointed as judicial factor?—Yes; if there are any considerable number of cases of that kind, so far as they are concerned, I think that the judicial factory system is the best.

*Chairman.*

3215. May I tell you this: that in the lists of cases of judicial factory that were before us, on the first page, I think there was a case of a property of the value of about 80*l.*, which might perhaps represent a small cottage, and the judicial factor's charge per annum was 2*s.* 6*d.*; I suppose, taking a very large number together, it might be worth his while?—Yes. Of course that is exceedingly small, and he must have undertaken it for the benefit of the family rather than of himself.

3216. No doubt?—However, from what I have heard to-day there seems to be a great deal to be said for the judicial factory system. It seems to have worked wonderfully well in Scotland. Whether it would work as well in England I do not know.

Mr. *Greene.*

3217. It does not seem to me that the two are absolutely inconsistent, because if power was given to the county court judge to nominate the judicial factor; that is to say, a person of his choice, to be a trustee in the matter of a particular trust, that is all that is proposed?—I can see no objection whatever to that.

3218. And it would work concurrently with the appointment of a public trustee for big matters if it was thought fit to use him?—Quite so; and in the course of time the public would discover which system was the better.

3219. But in the case of small property such as we have been talking of, in that particular part of the country, of which I have special knowledge, you think that the judicial factory system would work well?—Yes.

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# APPENDIX.

## APPENDIX, No. 1.

PAPER handed in by Colonel *Howard Vincent* (a Member of the Committee), 11 March 1895.

EXTRACT from the New Zealand Official Year Book.

THE PUBLIC TRUST OFFICE OF NEW ZEALAND.

*Its Constitution and Objects.*

THE Public Trust Office was constituted by "The Public Trust Office Act, 1872," and its functions have since been much enlarged by amending Acts, necessary to enable the office to meet the growing requirements of the public and of the business. The Amendment Acts of 1891 and 1893 present many new and important features. They facilitate the administration of properties placed in the office; provide for the administration by the public trustee of intestate estates of a value not exceeding 250*l.* without the expense of an order of the court; provide for the disclosure to the public trustee of the money and property of deceased persons, by persons, &c., having the custody of such property and knowing it to be vested in the public trustee; authorise a more prompt distribution of the residue of testate and intestate estates; provide absolute security from loss in all cases where the funds may be invested at the discretion of the public trustee in mortgages of real estate within the colony, or in General Government securities of the colony; and insure the regular and punctual payment of interest on such funds. By these provisions, and also by rendering practicable a more efficient conduct of the office and of the arrangement of the accounts, these Acts have raised the office in the estimation of the public.

*Its Security.—Capital Funds and Interest Guaranteed.*

The security and fidelity of the administration of the public trustee must undoubtedly afford great inducements to any person who may contemplate the appointment of a trustee. The Public Trust Office is a Government department. The fidelity of its administration is guaranteed by Statute; and, by "The Public Trust Office Acts Amendment Act, 1891," the colony guarantees the integrity of the capital funds of properties placed in the Public Trust Office, where there is no direction for the investment of such funds, or where there is no direction for such investment other than generally that the funds are to be invested at the option of the public trustee, in General Government securities of New Zealand or in mortgage of real estate within the colony.

The colony also guarantees on such capital funds for investment a common rate of interest, to be determined from time to time by Order in Council, and to be credited quarterly, free of all office charges of the Public Trust Office, to the properties from which the funds arise; and the value of this guarantee will be obvious when it is considered that it is—

(1.) The guarantee of the colony against loss from investments in bad or insufficient securities;

(2.) The guarantee of the colony against loss from delay in the investment of moneys;

(3.) The guarantee of the colony that the interest determined from time to time by Order in Council shall be regularly and punctually paid, free of all charges of the Public Trust Office.

THE PUBLIC TRUST OFFICE OF NEW ZEALAND, BY J. K. WARBURTON, PUBLIC TRUSTEE.

The Public Trust Office has been established for the purpose of affording at low rates of commission a secure and convenient recourse for persons resident as well abroad as in New Zealand, who may desire to form trusts in the colony, and who may be in doubt or difficulty as to the choice of trustees or executors. The office is also designed to relieve those who may be appointed trustees of property in the colony, or who, after having accepted trusts, may for various reasons be unable or unwilling to undertake or continue the administration.

The administration of the estates of persons dying intestate falls on the office in cases where the persons entitled to administer request the public trustee to do so, or neglect to obtain, within three months after the death of the intestate, the necessary authority to themselves administer. But the public trustee may at any time exercise the necessary powers of executor or administrator for the protection of the estate, and his authority to assume this temporary power extends to testate as well as intestate estates. This authority is highly serviceable to the interests of estates in every case where a property may be suffering, or in danger of suffering, injury in consequence of neglect or delay to take out probate or administration. The security of property is strengthened by the existence of an authority which can be invoked when protection is required.

The public trustee is also authorised by "The Lunacy Act, 1882," to undertake the administration of the estates of lunatics in every case where no committee may be appointed for the estate; and it may be remarked as an interesting fact that of the estates of the lunatics in the asylums of the colony fully 90 per cent. are administered by the public trustee.

For the purpose of the administration of statutory trusts the Public Trust Office renders very valuable and important services to the Government and to the colony. It is, and must obviously be, of great moment to the public that the administration of many funds and properties should be such as should leave no doubt that the directions of the trust will be faithfully carried out. Where a fund or property of which the Government may desire to create a trust is not specially authorised by Statute to be placed in the Public Trust Office, the purpose is served by the execution of an ordinary trust instrument.

The administration of a public trustee is exposed to a stronger light of public criticism than that of a private trustee could be, and any reasonable complaints from the beneficiaries or from anyone would be echoed by the Press as matters of public concern; and these considerations must be sufficient to assure a careful and strictly conscientious observance by the public trustee of his obligations to his trusts.

A person making a will or arranging a trust must always be seriously concerned as to the security of the capital funds; and the larger the amount of capital funds the greater will be the concern for security, and the less for the rate of interest.

The public trustee, in his official capacity, never dies, never leaves the country, and never becomes disqualified or involved in private difficulties, or distrusted. It will thus be evident that, by his appointment as trustee, the preparation of the numerous deeds, and the consequent expense, which might become necessary in the case of a private trustee are altogether obviated. These advantages will be readily appreciated by all who have any knowledge of the incidents of trusteeships.

*Wills and Trusts.*

To anyone desiring to appoint a trustee, or to any present trustees wishing to be relieved of a trust, the Public Trust Office is a satisfactory recourse, unless the trust should be such as the public trustee could not carry out, or the transfer would probably result in casting upon him the odium of a faulty administration for which he would not really be responsible.

Any property can be vested in the public trustee upon trusts defined in the deed creating the trust, and the income from such property can be paid as may be desired.

The draft of a will, or of a deed of trust or settlement, in which the public trustee is to be appointed executor or trustee, is examined in the Public Trust Office free of charge, for the purpose of bringing to light any provisions which may be either ambiguous or such as the public trustee could not follow.

Wills of living persons, whether under such wills the public trustee is or is not appointed executor, may be deposited in the office for safe custody. Testators who may appoint the public trustee to be their executor are recommended to secure the advantage of a provisional acceptance of their wills by the board of the office, and, thus, to learn whether the public trustee would accept the trusts of their wills, besides to obtain, free of charge, a careful consideration of any objections.

As executor of a will, the public trustee must act alone. The law forbids him to act in conjunction with another person.

It is gratifying to be able to state that the reputation and services of the office have attracted attention in the United Kingdom, and that already several trusts of money belonging to persons resident there have been accepted by the office.

*Intestate Estates.*

In the very large number of cases where persons die intestate, that is, without making any provision by will, it is the duty of the public trustee to administer if the relatives of the deceased are unknown, or are known to reside out of the colony, or where the person entitled by law to administer declines or neglects to apply for letters of administration within due time after death. Very few persons who have realised the care and responsibility which are inseparable from the administration of an estate, who understand what services the Public Trust Office is capable of rendering, and what relief may be obtained through the agency of the office, would not prefer to allow an estate in which they may themselves be interested, or which they are expected to manage, to be administered by the public trustee, who is a competent officer appointed by the Legislature, and experienced in this class of work. After the assets of an estate are realised, and the debts and expenses paid, the public trustee, on receiving satisfactory proofs of kinship, distributes the residue in accordance with the law. If the relatives have to be found, the public trustee takes active steps to trace them.

The public trustee's authority to administer, without an order of the court, intestate estates of a value not exceeding 250*l.*, is conducive to expedition and economy in the administration.

*Charges.*

When all the property in an estate has been realised and the money has been transferred to the common fund of the Public Trust Office, the income is paid to beneficiaries free of all office commission; but during the progress of administration and the realisation of the property, certain moderate fees and percentages are charged. These charges are no more than sufficient for the expense of maintaining the department without loss. It will be found that the charges for the administration of a property by the public trustee will compare very favourably with the expense of an administration by any other agency.

The legal expenses attending the administration of trusts are minimised by the appointment of the public trustee. The office solicitor's advice on all matters of administration is given without expense to the estates; and the beneficiaries of properties administered by the public trustee can obtain from him, free of charge, all the information that he can afford respecting their own interest in such properties.

The following is a statement of the number and value of estates remaining in the Public Trust Office at the close of the years 1890, 1891, 1892, and 1893 :—

| Class. | Number of Estates. | | | | Value of Estates. | | | |
|---|---|---|---|---|---|---|---|---|
| | On 31 Dec. 1890. | On 31 Dec. 1891. | On 31 Dec. 1892. | On 31 Dec. 1893. | On 31 Dec. 1890. | On 31 Dec. 1891. | On 31 Dec. 1892. | On 31 Dec. 1893. |
| | | | | | £. | £. | £. | £. |
| Wills and trusts - - | 288 | 343 | 354 | 371 | 418,047 | 415,160 | 442,671 | 543,238 |
| Intestate estates - - | 752 | 794 | 845 | 886 | 75,305 | 83,381 | 81,650 | 84,436 |
| Unclaimed realty - | 109 | 114 | 117 | 117 | 23,496 | 24,190 | 22,705 | 23,465 |
| Lunatic estates - - | 137 | 181 | 202 | 271 | 32,918 | 34,913 | 40,380 | 51,278 |
| Native reserves - - | 99 | 100 | 101 | 102 | 340,869 | 344,692 | 346,498 | 348,500 |
| West Coast Settlement reserves. | 293 | 293 | 293 | 293 | 349,462 | 350,289 | 350,853 | 400,000 |
| Totals - - | 1,678 | 1,825 | 1,912 | 2,040 | 1,240,097 | 1,252,625 | 1,284,757 | 1,450,917 |

## APPENDIX, No. 2.

PAPER handed in by Colonel *Howard Vincent* (a Member of the Committee), 11 March 1895.

### The Public Trust Office of New Zealand.

*Its Constitution.*

The Public Trust Office was constituted by "The Public Trust Office Act, 1872," and its functions have since been much enlarged by "The Public Trust Office Act Amendment Act, 1873," "The Public Trust Office Act, 1876," and by various statutes passed from time to time.

*Its Objects.*

The Public Trust Office was primarily established for the custody and management of property held in trust within the Colony of New Zealand; the subsequent extension of its operations has made the business of the office of wide range and of vast importance. Some of its more important duties, intimately affecting and available for the benefit of the great mass of the people, may be briefly summarised as follows:—

1. Administration of Intestate Estates;
2. Administration of Estates under Will;
3. Administration of Trusts;
4. Administration of Estates of Lunatic Patients;
5. Managing Property of absent Heir or Devisee; and
6. Managing Unoccupied Lands of absent Owners.

*Its Security.*

Undoubtedly one of the greatest attractions of the Public Trust Office is the security it affords to all who place their business in its charge. It is a Government department, and the integrity of its officers is guaranteed by statute; therefore those who place their property in the office are secured from loss by fraud on the part of any officers of the Department. This is a most important feature, and should be duly considered by every person about to make a will, or seeking a trustee in whom to vest any property; by every present trustee wishing to be rid of the worry and anxiety of his position, and by every widow desiring to be relieved of the risks and responsibilities of administering her deceased husband's estate. For all such this office affords security that cannot be obtained anywhere else. Many persons, who are now feeling the pinch of reduced circumstances, would, had they availed themselves of it, be still living in comfort.

*Its Facilities for Business.*

The Public Trust Office is situated at Wellington, where the public trustee resides, and personally directs the work of the Department. There are, besides the head office, 24 appointed agents of the public trustee, resident in the principal centres of population in both islands, who carry out the work of the Department in their respective districts under instructions from the public trustee, to whom they report from time to time They are gentlemen specially selected for their great local knowledge and business capabilities; whilst in the carrying out of their many duties they have the privilege of the assistance, when necessary, of officers of other departments of the Government service. Thus it will be apparent that the Public Trust Office, working as it does in harmony with the other departments of the Government service, enjoys special facilities for carrying on the business entrusted to it and clients of the office, while gaining security, can rest assured that their affairs are in competent hands, and that their interests will be well protected.

*Its Success.*

That the establishment of the Public Trust Office met a want much felt is borne out by the signal success which has attended its career. Those who have watched its balance-sheets, annually laid before both Houses of the Legislature and printed as Parliamentary Papers, will have noticed the steady growth of its business, evidencing the fact that the public is becoming more and more alive to the benefits of the office, and stamping it as one of the most useful and successful institutions of the present day. If it were necessary to prove the popularity of the office and the confidence reposed in it, no better evidence could be furnished than that provided by the wills and trusts branches of the office, which deal with business, the placing of which in the office is the voluntary act of individuals. The rapidly increasing number of wills being made, appointing the public trustee executor, far exceeds expectation, as do also the number of trusts created in or transferred to the office. This appreciation of the office by the public not only proves its utility, but confirms the foresight which prompted its establishment.

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Subjoined are fuller particulars of the Public Trust Office, which will be found useful:—

*General.*

Detailed accounts of every property in the Public Trust Office are kept in the Head Office at Wellington, where all information can be obtained. All moneys received on account of any estates or properties are transmitted by the agents to the head office, from whence all payments are made, the public trustee's cheques being drawn on the branch of the Bank of New Zealand most convenient to the payee.

*Assets of Estates*

Are conserved or realised to the best advantage by the agents of the public trustee, due regard being paid to all surrounding circumstances and to the provisions of any law, will, or trust deed affecting the same.

*Claims on Estates*

Have to be made on the prescribed form, supported by a declaration by the claimant, and must then be forwarded to the local agent of the public trustee, whose duty it is to make a careful examination of the same, and when satisfied as to their correctness certify to that effect and transmit them to the head office; they are then subjected to a careful scrutiny by the audit department, and, if admitted, are passed for payment. It is one of the aims of the office to pay all claims immediately they have passed the audit. Whenever any delay occurs in this matter, it is owing to circumstances which render such payment impossible. Every care is taken to guard estates from unjust claims.

*Scale of Charges.*

The remuneration for the services of the Public Trust Office is provided for by scales of charges made by the Governor by Orders in Council.

Briefly, these charges consist of certain moderate fees for certain specified services, if required to be performed, and a percentage on the value of the property administered by the office. These charges have been adjusted to fall as lightly as possible on the properties administered, but so as to secure a return sufficient to meet the cost of maintaining the department and leaving a slight margin of profit. It will be found that the charges of the office for administering a property will compare very favourably with the total cost of an administration by any other means.

*Investments.*

By the provisions of wills, settlements, and other trust instruments, the Public Trust Office has considerable sums of money to invest, and in the placing of these moneys the provisions of the wills or other trust instruments affecting the same in that behalf are faithfully carried out. A person can by his will, or deed creating a trust, provide not only in what securities the fund shall be invested, but the method by which the investment is to be effected, thus retaining a controlling hand over the actions of the public trustee.

First Mortgages of Real Estate is the class of investment in highest favour. The practice of the office is to receive every application for a loan on a prescribed form, giving full particulars, through one of its local agents, who, when an application appears one likely to be entertained, instructs a valuator approved by the office to inspect and furnish a detailed valuation of the security offered, at the cost of the applicant; which being obtained, he forwards the application and the valuation, together with a confidential report of his own, to the head office; the Government valuation for taxing and rating purposes is then obtained and the papers are placed before the board of the office. If satisfactory, the loan is granted; but no sum greater than one-half the value of the property offered as security is lent, unless the provisions of the trust controlling the funds for investment provide otherwise. The rate of interest obtainable varies from time to time and according to circumstances: the prevailing rates now are between 6 and 8 per cent. per annum.

The charges for investing money are—

| | |
|---|---|
| For every transaction - - - - - - - - - - - - | 10*s.* per cent. |

No charge is made on receipt of money withdrawn from investment.

*Intestate Estates.*

This is one of the most important branches of the Public Trust Office. A very large number of people die without having made provision by will for the administration of their estates. In such cases it is the duty of the public trustee to administer estates where relatives are unknown, or who are known to reside out of the Colony, or where the person entitled by law to administer declines or neglects to apply for Letters of Administration within due time after death. Very few persons are acquainted with the trouble and responsibility inseparable from the administration of an estate, and any person before assuming these would do well to consider whether it is not better to decline and allow the estate to be administered by the public trustee, who is a responsible officer provided by the Legislature and experienced in this class of work. After the assets of an estate are realised and the debts and expenses paid, the public trustee on receiving proofs of kinship, distributes the residue in accordance with law amongst the next of kin, the share of anyone residing in England being remitted through the Agent General for the Colony in London.

The percentages charged on this class of estates are—

| | |
|---|---|
| On the first 250*l.* - - - - - - - - - - - - | 7*l.* per cent. |
| On all over 250*l.* - - - - - - - - - - - - | 5*l.* „ |

*Estates Under Will.*

This branch, with the following one, is the most rapidly increasing section of the business of the Public Trust Office. People are beginning to realise the fact that only by appointing the public trustee executor can they obtain valid security that the provisions of their wills will be carried out by their appointed executor. Experience shows that many persons out of feelings of friendship consent to be named as executors in wills, who, when the time arrives for them to act in that capacity, either decline altogether, or, if they do act, simply proceed until some difficulty arises, when becoming conscious of the responsibilities of their position they apply to Court to have their duties transferred to others. The number of estates in this partially administered condition transferred to the Public Trust Office is rapidly increasing and points to the fact that it would be wiser for testators to at first appoint the public trustee executor, as by so doing the expense of transferring the estate from one administrator to another would be saved.

To exeeutors anxious to be relieved of their duties, the Public Trust Office offers a means of doing so without causing any anxiety as to the future carrying out of the provisions of the wills.

Upon the execution of a will appointing the public trustee executor, it is desirable that the same should be submitted, although this is not absolutely necessary, to the board of the office for provisional acceptance. When this has been done and the provisional acceptance has been endorsed on the will, the final acceptance and carrying out of its provisions follow almost as a matter of course after the death of the testator.

The Public Trust Office is also a place where any wills can be registered and deposited for safe keeping.

The percentages charged by the office for the realisation of estates under will are—

| | |
|---|---|
| On the first 1,000*l.* - - - - - - - - - - - - | 5 per cent. |
| On the next 3,000*l.* - - - - - - - - - - - - | 4 „ |
| On the next 6,000*l.* - - - - - - - - - - - - | 3 „ |
| On all over 10,000*l.* - - - - - - - - - - - - | 2 „ |

*Trusts.*

To anyone desiring to appoint a trustee, or to any present trustee wishing to be relieved of his trusts, the Public Trust Office offers a ready and safe means.

Any property can be vested in the public trustee upon trusts defined in the deed creating the trust. Incomes from trusts can be paid over in any way desired.

It is gratifying to be able to state that the reputation and benefits of the office are attracting attention in England, and that already several trusts of moneys belonging to persons resident there have been accepted by the office. The incomes derived therefrom are paid in England through the Agent General for the Colony.

The percentage charge of the office in this class is 5*l.* per cent. on all moneys received other than the capital of the trust, which is accepted without this charge.

*Estates of Lunatics.*

The public trustee administers the estates of lunatics during the time they are patients in any lunatic asylum. The percentage charge of the office is 5*l.* per cent. on receipt of all moneys.

*Property of absent Heir or Devisee, and Unoccupied Lands of absent Owners.*

The public trustee is empowered to manage these properties, and, with the sanction of the board of the office to lease lands for any period not exceeding seven years ; such property being handed over, with all accumulations, on the heir or owner proving his title.

Full information of the powers and duties of the public trustee can be obtained on application to the public trustee in Wellington, or to any of his agents throughout New Zealand.

All letters should be addressed to the Public Trustee, Custom House Quay, Wellington ; or to the Agent of the Public Trustee at any of the undermentioned places :—Auckland, Blenheim, Christchurch, Clyde, Dunedin, Gisborne, Greymouth, Hokitika, Invercargill, Kaikoura, Masterton, Napier, New Plymouth, Nelson, Oamaru, Palmerston North, Patea, Tauranga, Timaru, Wairoa, Wanganui, Westport.

Wellington, 2 April 1888.

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The Public Trust Office of New Zealand is a Government institution to afford, at low rates of commission, a secure and convenient recourse for those who, desirous of forming trusts in the colony, cannot satisfactorily appoint private trustees or executors, and for persons unable or unwilling to undertake or continue the administration of the trusts accepted by or imposed upon them.

The Public Trust Office, constituted by "The Public Trust Office Act, 1872," has been since much enlarged in its functions by amending Acts to meet growing requirements. The Amendment Act of 1891 facilitates administration, authorises prompt distribution, provides absolute security against loss to estates from investments at the discretion of the public trustee, and insures the regular payment of the interest.

The security and fidelity of the public trustee's administration must be considered of the utmost importance to every person contemplating the appointment of a trustee. The colony guarantees the fidelity of the administration, and guarantees also the integrity of the capital funds invested at the option of the public trustee. The colony guarantees also, on the capital funds arising for investment out of the properties placed in the Public Trust Office, a common rate of interest, to be paid quarterly, free of all charges of the Public Trust Office.

The value of this guarantee is in the guarantee of the colony against loss from investments in bad or insufficient securities, and against loss from delay in investment, and for the regular and punctual payment of the interest, free of all charges of the Public Trust Office. In the appointment of trustees there must always be serious concern as to the security of the capital funds; and the larger the capital funds the greater must be the concern for security, and the less for the high rate of interest. The public trustee cannot die, cannot leave the colony, cannot become disqualified, or involved in private difficulties ; and cannot be distrusted.

In private trusteeships, death and absence render necessary numerous and expensive deeds not required by public trustee's administration, which has, besides, the office solicitor's advice without expense to the estates. By all who know or have experienced the contingencies of private trusteeships these advantages must be appreciated.

For further information apply to the Agents of or to The Public Trustee, Wellington.

## APPENDIX, No. 3.

PAPER handed in by the Honourable Sir *Julius Vogel*, K.C.M.G., 15 March 1895.

PUBLIC TRUST OFFICE, WELLINGTON, 1st March 1894.

EXTRACTS from the Regulations, and Scale of Charges in Force in the Public Trust Office.

1. THE Public Trust Office shall be at the seat of Government, in such premises as the Colonial Treasurer from time to time directs. The premises used and occupied at the date these regulations come into force shall continue to be the Public Trust Office without and until further direction.

2. The office shall be open for public business daily from 9 a.m. to 1 p.m., and from 2 p.m. to 5 p.m., except on Saturdays, when it shall close at 1 p.m., and it shall not be open at all on Sundays, Good Friday, and Christmas Day, or on such other days or times as shall be declared or appointed by Government to be general public holidays.

3. The Board of the Public Trust Office (hereinafter referred to as "the Board") shall meet for the despatch of business at the Public Trust Office, and shall be called together by the Public Trustee, or by adjournment of a previous meeting.

11. When it is desired to place property in the Public Trust Office under the 17th section of "The Public Trust Office Act, 1872," by deed, will, or other instrument, written application shall be made to the Public Trustee, stating the nature of the property proposed to be dealt with, and describing shortly the trusts and powers declared and conferred respecting such property.

12. When the trusts and powers respecting any property cannot be conveniently expressed in a written application, a draft of the proposed deed, will, or other trust instrument, shall accompany the same, and shall be submitted to the Board, who shall consider such draft, and may make or suggest alterations therein or additions thereto; but the Board shall not formally accept the trusts set forth until the execution or completion of such deed, will, or other trust instrument.

13. If the Board is of opinion that the property intended to be placed in the office and the trusts and powers proposed to be vested in and conferred on the Public Trustee are such as can be administered by him in accordance with law, the Board may accept such property upon the trusts and powers agreed to by it; but in the case of a will the trusts thereof shall only be accepted in the manner prescribed by "The Public Trust Office Act, 1872."

14. The Board may at any time accept the trusts of any property if satisfied that the law has been complied with, without preliminary consideration of a draft deed, will, or other instrument.

15. It shall be the duty of the Public Trustee to cause all notices as to the acceptance or rejection of the trusts proposed to be vested in the Public Trustee by any deed, will, or other instrument to be given or published as the law requires.

16. When it is proposed to lend any money on security of real estate, the Board shall not agree to such loan *until a valuation of the security, made by a valuer or valuers appointed or approved by the Public Trustee, has been obtained.*

No such security shall be taken except on first mortgage of land held in fee-simple in possession, and no moneys shall be lent which shall exceed one-half of the value of the property to be mortgaged.

17. Nothing in the last-preceding regulation shall interfere with or control any powers of investment given to the Public Trustee under any deed, will, or other trust instrument, which may expressly direct or authorise investments of a different nature or value from those mentioned in the said regulation.

18. Wherever the Public Trustee is entitled to any charge under the scale hereinafter set forth, he may deduct the same from any funds then in his hands or under his control and belonging to the estate or person by which or by whom such fee or charge is payable.

19. The Public Trustee shall, from time to time, at convenient intervals, not exceeding six calendar months at any one time, render accounts showing the position and state of every property held under will or other express trust in the Public Trust Office to every person who is entitled thereto or interested therein, and all such accounts shall be so rendered free of all charge: Provided that if any person shall require extra copies of such accounts, or a copy thereof at any other time than the fixed period for rendering the same, such person shall pay the charge prescribed in respect thereof: Provided also that the Public Trustee shall have the sole discretion as to who is or are the proper person or persons to whom such accounts shall be rendered.

20. In special cases the Public Trustee may agree to reduce any charge authorised by or under the scale of charges hereinafter set forth, *but the agreement to reduce shall be made upon the estate being placed in the office, and must be approved by the Board.*

SCHEDULE OF CHARGES.

The following fees and sums of money shall be charged as the cost of management of property and estates placed in the Public Trust Office or under the control of the Public Trustee, and upon all moneys received in the said office :—

(*a*) Being the gross proceeds of any testate estate or of any trust estate realised by the Public Trustee :—

| | |
|---|---|
| On the first 1,000*l.* | 5*l.* per cent. |
| On the next 3,000*l.* | 4*l.* per cent. |
| On the next 6,000*l.* | 3*l.* per cent. |
| On all over 10,000*l.* | 2*l.* per cent. |

(*b*) Being the gross proceeds of any intestate estate realised by the Public Trustee :

| | |
|---|---|
| On the first 250*l.* | 7*l.* per cent. |
| Above 250*l.* | 5*l.* per cent. |

*N.B.*—There shall be excepted from and out of the charges under the letters (*a*) and (*b*) all sums realised by the Public Trustee in any testate, intestate, or trust estate, which shall consist of any balance at credit of any current account with any bank, deposits in any savings bank, the amount of any fixed-deposit receipt and whether in a bank or in or with any company or society, or moneys received under any policy effected on a life or lives ; and on these four classes of proceeds there shall be charged a percentage of one-half the above-mentioned rates.

(*c*) Being the gross rents, profits, income, or proceeds of or from any real property administered for the benefit of the absent heir or owner under Section 20 of "The Public Trust Office Act Amendment Act, 1873," or taken possession of under Section 10 of "The Public Trust Office Act, 1876" - - - - - - - - - - - - - - - 5*l.* per cent.

(*d*) Being the gross income, profit, and produce of moneys, properties, or estates vested in the Public Trustee by or under statute or regulations, or by will, deed, or other trust instrument not otherwise specially charged - - - - - - - - - - 5*l.* per cent.

[This does not apply to the interest derived from money in the common fund. Such interest is paid clear of all charges of the Public Trust Office.]

(*e*) Being the gross proceeds of any lunatic's estate managed under the provisions of "The Lunatics Act, 1882" - - - - - - - - - - - - - - - - - 5*l.* per cent.

* * * * * * * *

(*g*) To be deducted from or charged against the value of movable or immovable property bequeathed, devised, or taken over in kind by the person entitled thereto ; such value to be ascertained by a competent valuer to be appointed by the Public Trustee ; such charge to be paid by the person to whom the property is bequeathed or devised, unless a contrary intention is declared in the trust instrument :—

| | |
|---|---|
| On the first 1,000*l.* of such value | 2*l.* 10*s.* per cent. |
| On the next 3,000*l.* | 2*l.* per cent. |
| On the next 6,000*l.* | 1*l.* 10*s.* per cent. |
| On all over 10,000*l.* | 1*l.* per cent. |

(*h*) On all sums lodged in the Public Trust Office under or in pursuance of the provisions of any Act, rule, or law in that behalf at the time of lodging the same : Provided that all sums lodged in the Public Trust Office, or coming under the control of the Public Trustee, which arise out of the provisions of, or come within the meaning of, wages and effects of deceased seamen in "The Shipping and Seamen's Act, 1877," shall be exempted from the charge hereby imposed : Provided also that in any case where, in the opinion of the Public Trustee, it would be inequitable that the charge hereby made should be paid on lodging the money, the same may be postponed until such money is paid out of the Public Trust Office, when the said charge shall be deducted from such money and all accumulations thereof (if any) - - - - - - - - - - 1*l.* per cent.

(*i*) For any application to the Court relating to any property in the Public Trust Office (other than for grant of probate or administration), where the Public Trustee or the office solicitor moves in person - - - - - - - - - - - - - - 2*l.*

Provided that, in any matter of minor importance, or in a small estate, this fee may be reduced to any sum not less than - - - - - - - - - - - - 1*l.*

(*j*) For the preparation of the necessary instruments and application to a Judge in Chambers for an order of administration or grant of probate when made by the Public Trustee in person or by the office solicitor : 7*s.* 6*d.* per cent. on the gross realised value of the property, but so that in no estate shall the charge be less than 1*l.* or exceed 10*l.* ; and in case the estate shall not have been or be, in its nature, realisable, then the charge to be made shall be based on the value of the estate upon which duty is paid or payable under the Acts relating to duty on estates of deceased persons.

(*k*) For preparing and passing stamp accounts under "The Deceased Persons' Estates Duties Act, 1881," and any amendment thereof, and lodging duty : 2*s.* 6*d.* per cent. based on the value of the estate upon which duty is paid or payable under the Acts relating to duty on estates of deceased persons, but so that in no estate shall the charge be less than 5*s.* or exceed 5*l.*

(*l*) For preparing land or income-tax returns under any Act in force relating to land or income-tax, and paying tax :—

| | |
|---|---|
| Where value of property under 500*l.* | 2*s.* 6*d.* |
| Where value exceeds 500*l.*, then 2*s.* 6*d.* for every 500*l.* of value ; but not in any case to exceed, in all | 2*l.* |

(*m*) For investment of money :—

| | |
|---|---|
| On every single investment | 10*s.* per cent. |

*Note.*—On money which falls into the common fund for investment, no charge is made for the investment.

(*n*) For advances to estates without realised funds administered by or placed in the Public Trust Office, exclusive of interest, where the Board deems it desirable to make an advance - - - - - - - - - - - - - - - - - - - - 1¼*l.* per cent.

(*o*) For every lease prepared by the Public Trustee and executed in favour of any lessee, exclusive of stamp duty and registration fee, to be paid by the lessee - - - - 1*l.*

*Note.*—This charge is, of course, only for leases for which the charge is not otherwise fixed by Act.

(*p*) For the Public Trustee's consent to, or execution of, any assignment or other disposition of any leasehold, not being an assignment consequent upon a sale by the Public Trustee - - - - - - - - - - - - - - - - - - - 10*s.*

(*q*) For the execution by the Public Trustee of any conveyance, transfer, assignment, or other document necessary for completing the title to any property or interest therein, in favour of any person equitably entitled thereto, but the legal estate in which vests in the Public Trustee under the Lunatics Act, or under any other Act, and no proceeds of sale pass through the Public Trustee's account: 10*s.* per cent. on the value of the property as assessed by the Commissioner of Taxes on the last preceding assessment thereof up to 500*l.*, and for every additional 100*l.* or fractional part thereof 5*s.* per cent. on such value; but so that in no estate shall the charge be less than 1*l.* or exceed 5*l.*

(*r*) For receiving and recording a will under which the Public Trustee is appointed trustee or or executor - - - - - - - - - - - - - - - - - - - Nil.

(*s*) For receiving and recording a will under which the Public Trustee is not appointed trustee or executor - - - - - - - - - - - - - - - - - - - 10*s.*

(*t*) Upon leasing or letting land or houses, if leased for 12 months or upwards, on one year's rent - - - - - - - - - - - - - - - - - - - - 5*l.* per cent.

If let for less than a year, as may be arranged.

(*u*) For conditions of sale of any realty, if on the printed form - - - - - - - 10*s.*

(*v*) Preparing report under Section 322, "Lunatics Acts, 1882" - - - - - - - 1*l.*

(*w*) Preparing transmission under "The Land Transfer Act, 1885," if on the printed form, or registering order of administration, or will, against any estate or interest registered as a title in any Deeds Register Office - - - - - - - - - - - 10*s.*

(*x*) For release by each next of kin, if on printed form - - - - - - - - - 5*s.*

(*y*) Receipt under Section 50 of "The Property Law Consolidation Act, 1883," or Section 100 of "The Land Transfer Act, 1885" - - - - - - - - - - - - 7*s.* 6*d.*

(*z*) For making any copy of any document, 6*d.* per folio, but no charge less than 1*s.*

In addition to the above-mentioned charges, estates will be liable to all expenses to which the office may be put in legal assistance or legal proceedings, fees payable in any court or public department, surveys, the collection of rents, auctioneers' charges, and any other services or expenses whatever which, in the opinion of the Public Trustee, may be necessary or expedient to be provided or incurred in the management of such estates.

## APPENDIX, No. 4.

PAPER handed in by Sir *Charles Pearson*, 18 March 1895.

REPORT BY THE COMMITTEE ON BILLS OF THE FACULTY OF PROCURATORS IN GLASGOW ON THE PUBLIC TRUSTEE AND EXECUTOR BILL, 1894.

*List of Committee.*

James Graham, LL.D., *Dean.*
William Henry Hill, LL D.
William Lochore Brown.
John J. Coats.
Richard Brown.
C. D. Donald.

*Members of Council.*

John F. Orr, *Clerk.*
John A. Spens.
John Turnbull.
A. M. Lindsay.
Cathcart Kay.
T. A. Fyfe.
Wm. Craig Roberton.
A. Millar Bannatyne.
James Muirhead.
James Donaldson.
Alexander Foulis.
A. Craig Paterson.
Matthew P. Fraser.
Henry A. Roxburgh.
William Shaw.
The Dean, *Convener.*

### REPORT.

### THE PUBLIC TRUSTEE AND EXECUTOR BILL, 1894.

IN the Session of 1890 Lord Halsbury introduced into the House of Lords a Public Trustee Bill, and in every Session of Parliament since 1890 that Bill, as amended twice by the Standing Committee of the Lords, has been in substance reproduced, the last version of the Bill bearing the fuller title of The Public Trustee and Executor Bill. On each occasion of its introduction into Parliament the Bill received the consideration of this Committee, and a petition against the Bill was lodged pointing out that, while the Bill was apparently applicable to Scotland, the machinery provided was applicable to England only. On the question of principle, the Committee contented themselves with the statement that "there is no need in Scotland to make provision for the appointment of a Public Trustee by the State, and that such an appointment would lead both to delay and to expense." In consequence of the appointment by the House of Commons towards the close of last Session of a Select Committee on the subject of Trustee Administration, including the question of a Public Trustee (which will no doubt be reappointed next Session), this Committee have thought it right to consider more fully than they have hitherto done and to report upon the principle involved in the appointment of a Public Trustee for Scotland.

They are of opinion that the appointment of a Public Trustee for Scotland is uncalled for.

In the memorandum prefixed to the Public Trustee and Executor Bill, it is stated that the object of the appointment is to meet the difficulty which is frequently experienced in finding or choosing suitable trustees and executors, and this, it is believed, is the reason which has suggested the appointment of such an official in certain of the Colonies, where a testator frequently has no friends whom he can name as trustees.

It may be, too, that such a difficulty occurs to some extent in England, where the law does not recognise the right of trustees to act by a quorum, thereby causing considerable embarrassment in the event of a trustee's absence, and a good deal of additional personal trouble to each trustee. The risk of having the management thrown into Chancery may also deter persons from acting as trustees, and the system of treating investments of Trust Funds as investments on joint account without reference to the trust character creates difficulties which do not occur in Scotch Trusts.

However this may be—whether the difficulty of getting trustees to act exists in England, and whether or not the differences between the English and Scotch systems of trust administration account for it or not—the Committee are of opinion that the difficulty alleged has not been felt by the profession in Scotland as of a serious description, and that no legislation on the subject is required.

In Scotland adequate provision already exists for the appointment of an official or semi-official trustee where private individuals decline to act, it being competent, where trustees decline to act, or where all die out or are removed from office, for any beneficiary to apply to the Court for the appointment of other trustees or of a judicial factor who may act as executor also. The appointment of such persons, trustees or judicial factor, does not involve the administration of the estate by the Court, although the persons are appointed by the Court; and, whilst the judicial factor does not have all the powers competent to gratuitous trustees, he has for all practical purposes sufficient powers, and has all the powers which it is at all likely a Public Trustee and executor would have. At present there is in Scotland no risk of a truster's wishes miscarrying from the failure of the machinery to carry them into effect.

It may be added that in view of the dislike Scotsmen as a rule have to officialism, it is believed that were a Public Trustee appointed his services would very rarely be called for.

The question whether the procedure in the application for the appointment of a Judicial Factor could be simplified is one which would fall to be dealt with in any reform of Court procedure generally.

The Committee have only to add that, if it be resolved to proceed with legislation for the appointment of a Public Trustee, they remain strongly of opinion that it should be done under a separate Act applicable to Scotland alone, which would provide the machinery, or prescribe the means of obtaining, by Act of Sederunt, the machinery, required for putting such an appointment into practice.

In name of the Committee,

Glasgow, 13 February 1895. *James Graham*, Dean of Faculty.

## APPENDIX, No. 5.

PAPER handed in by the Honourable Sir *Julius Vogel*, K.C.M.G., 18 March 1895.

### PRÉCIS OF THE PUBLIC TRUST OFFICE CONSOLIDATION ACT, 1894 (NEW ZEALAND).

SECTION 1.—The short title is The Public Trust Office Consolidation Act, 1894.

Section 2.—Is the Interpretation Clause.

Section 3.—Provides that there shall be a Public Trust Office administered by an officer called the Public Trustee, who shall be appointed by the Governor in Council and shall hold office during his pleasure on the same terms and conditions as the ordinary Civil Service officers.

Sections 4–8.—The Public Trustee is a corporation sole; he may be removed or suspended. The Governor in Council may appoint a Deputy Public Trustee. The Colonial Treasurer may appoint or remove other officers than the Public Trustee or Deputy Public Trustee, who shall hold their offices on the same terms as civil servants. All salaries shall be such as are fixed by the General Assembly.

Sections 9–10.—There shall be a Public Trust Office Board, consisting of the Colonial Treasurer, the Native Minister, the Solicitor General, the Government Insurance Commissioner, the Commissioner of Taxes, the Surveyor General, and the Public Trustee. The Governor in Council may from time to time make, alter, and revoke bye-laws for regulating the conduct of business and the proceedings of the Board. "Before the Public Trustee shall be appointed or accept any appointment as trustee, executor, administrator, guardian, committee agent, or attorney, or any other appointment under this Act, the question of such appointment shall be submitted to the Board, and unless the Board assents thereto no appointment shall be made or accepted. Provided that this requirement shall not apply to an intestacy, except where the Board specially directs the Public Trustee not to accept administration of any intestate estate. Under no circumstances shall the Public Trustee accept any appointment jointly with any other person." The Public Trustee shall be subject to the directions of the Board.

Section 11.—Describes how the Public Trustee may enter into contracts.

Section 12.—Reads as follows: "Where the Crown, the Governor in Council, or the Governor, or a public officer, or a court, judge, public or private corporate body, or any person, now or hereafter can appoint a trustee, executor, administrator, guardian, committee agent, or attorney, any of such appointments may be made of the Public Trustee if he consents thereto. The duties and rights of the Public Trustee under any appointment shall be the same, subject to the express provisions of this Act, as if the appointment had been made of a private person."

Section 13.—With the consent of the Supreme Court, or a judge thereof, trustees, executors, or administrators, may appoint the Public Trustee to act in their place as sole trustee, executor, or administrator. Application to the court or judge may be made by petition or otherwise, and the court or judge may make such order as it or he thinks fit. Applications to the court or judge may be made by any one out of several trustees, executors, or administrators. When any appointment of the Public Trustee under this or the next section is made, then by virtue of the appointment all property rights, powers, and functions shall, without any conveyance or assignment, become vested in the Public Trustee. "The Public Trustee when appointed or acting under this Act as trustee, executor, administrator, guardian, committee agent, or attorney, shall have the same rights and immunities as a private person acting in any of those capacities would have."

Section 14.—The Public Trustee on application is entitled by right to the administration of any intestate estate, "Provided that if some other person within the colony who, if it were not for this section, would be entitled to administration" applies for it, then the court or judge may grant it to him.

Section 15.—In certain cases the Public Trustee may administer any intestate estate the value of which does not exceed 250*l*., without grant of administration.

Section 16.—The Public Trustee may exercise certain powers with regard to the estate of any deceased person, whether testate or intestate, pending grant of probate or administration to the person entitled thereto. He may not, however, part with any property save personal property of a perishable nature without an order from a judge of the Supreme Court.

Section 17.—Before taking action under the last section, the Public Trustee must give notice in writing or by telegram to any person whom he knows would be entitled to obtain probate or letters of administration.

Section 18.—When a person dies testate, and application is not made within three months for probate or letters of administration, the Public Trustee may apply for letters of administration, and the judge shall grant the same unless the person entitled to probate or letters of administration apply for same or gives a reason satisfactory to the judge why further delay is unavoidable. A person entitled who was out of the colony when the Public Trustee applied for and obtained letters of administration may apply to the court or a judge, and probate or administration may be granted to him at the discretion of the court or judge, after which the powers of the Public Trustee over the estate cease subject to the repayment to him of any expenditure or liability already incurred.

Section 19.—Provides for validation of acts done by Public Trustee when acting under probate or administration granted in error.

Section 20.—Subject to the terms of any will the Public Trustee shall hold the shares belonging to infants, and administer them until infancy ceases.

Sections 21–26.—Provide for dealing with estates of small amounts for the benefit of widows and infants, for distributing to widows the residue of intestate estates after the lapse of three years in cases in which no next-of-kin are known of or by reasonable efforts can be discovered, but such distribution shall not prejudice the recourse by any person entitled against the widow. Provisions are also made for applying income, and if necessary capital, (not exceeding one-half) for the maintenance, education, and benefit of infants. These limitations, however, do not prejudice the authority of any court to make an order for the maintenance, education, advancement, or otherwise for the benefit of infants.



Section 27.—

Section 27.—Defines the general powers of the Public Trustee and the limitations thereof.

Section 28.—Deals with the procedure by which the Public Trustee may submit questions of law to judges of the Supreme Court.

Sections 29–31.—Capital moneys, unless expressly forbidden to be so invested, shall form a Common Fund, and the investment thereof shall not be made on account of, or belong to, any particular estate. The interest on the Common Fund to be paid to the respective estates shall be determined by Order in Council, and shall be paid quarterly. No interest in any of the estates in the Common Fund shall exceed 5 per cent. on amounts up to 3,000*l.*, and on larger amounts the interest shall not exceed 5 per cent. on the first 3,000*l.*, nor 4 per cent. on the excess. Moneys expressly desired to be invested in securities other than those prescribed for investment for the Common Fund shall be invested as desired, but shall not enjoy the guarantee of the Act, and if there is loss the estate concerned shall bear it. Moneys belonging to the Common Fund may be invested in securities described under four heads.

(*a*) The Government Securities of the United Kingdom and the Colonies and dependencies thereof.

(*b*) The debentures issued by any "local authority" under competent law, secured upon special or general rates or upon real estate held in fee simple free from encumbrances, or upon the rents and profits of real estate free from encumbrances, provided that no greater advance shall be made than one-half of the value of such real estate, or, in the case of rent and profits, that they shall be sufficient to pay double the annual interest payable in respect of the advance. A definition is added of the words "local authority."

(*c*) The advances by way of mortgage on real estate held in fee simple free from all encumbrances to an amount not exceeding one-half of the value.

(*d*) The fixed deposits in banks.

Section 32.—Whenever there is a deficiency in the Common Fund the Colonial Treasurer shall make it good out of the Consolidated Fund. No deficiencies arising from investments upon mortgage of real estate entered into before the Act of 1891 shall be made good, unless the Public Trustee sees fit to charge for guarantee a sum of 10*s* per cent. per annum, to be paid out of the interest arising from the mortgage, in which case the investment will be protected against losses. This section is to be deemed to have come into operation after the passing of the Act of 1891. The substance of it was, in fact, included in that Act.

Sections 33-40.—Deal with accounts. Moneys in or payable to the Public Trustees Account by the Public Trustee or any of his officers shall be deemed to be the property of Her Majesty, and shall be recoverable in like manner as debts due to the Crown. Advances to a certain extent may be made to estates in anticipation of realisation. The Public Trustee is to prepare a yearly balance-sheet. If the balance at the credit of profit and loss account is at any time insufficient to meet the charges thereon, the Colonial Treasurer may from time to time advance out of the Consolidated Fund sums necessary to meet such charges. These advances are to be repaid as soon as the Public Trustees Account admits thereof. If the profit and loss account shows a balance more than necessary to meet the charges thereon, the Public Trustee shall invest one-fourth part of such balance, and shall retain the same, with its accumulations, as an assurance and reserve fund, out of which the deficiency of any subsequent year may be provided, and shall from time to time, when directed so to do by the Colonial Treasurer, pay the remaining three-fourths of the excess into the Consolidated Fund. The Public Trustee shall pay all salaries and general expenses of the general service of the office legally authorised, and all current expenses and charges and moneys payable to any persons entitled thereto. The Colonial Treasurer is to have access to the books and papers of the office; the Auditor General is to have the same powers in respect to the Public Trust Office as he has in regard to any department of the Civil Service. Any officer or agent of the Public Trustee may pay, out of moneys in his hands, any claims which he is directed by the Public Trustee to satisfy.

Section 41.—Regulates the conditions under which the Public Trustee may hold shares, stock, or property in companies.

Section 42.—The Public Trustee shall not be required to give bond or security on being appointed trustee, executor, administrator, guardian, committee agent, or attorney.

Sections 43–44.—Any testator may deposit his will in the Public Trust Office for safe custody, or for acceptance or rejection after his death. If a will is deposited for safe custody, the Public Trustee, after the testator's death shall deliver it to such person as the testator may have directed in writing, or, in the absence of such direction, to the person the Public Trustee thinks entitled to receive it. If the will is deposited for acceptance or rejection after testator's death notice of such acceptance or rejection shall be given by the Public Trustee. With the consent of the Board the Public Trustee may consent to act under the will. If appointment under the will is rejected notice thereof shall be sent by the Public Trustee to interested persons.

Section 45.—The Public Trustee may make payments which require to be made by order of court without such order when the amount does not exceed 50*l.*

Section 46.—Relates to payment of claims on estates in which the assets are insufficient to pay liabilities in full.

Section 47.—Provides for distribution of assets of estates and closing the administration thereof.

Section 48.—Provides that a certificate under the hand and seal of the Public Trustee shall be accepted as sufficient proof of the death of the deceased person and of the Public Trustee having become administrator.

Section 49.—Moneys and personal chattels payable or deliverable to residents in, and subjects of, a foreign country may be handed to the Chief Consular Officer of that country, and his receipt will be a good discharge to the Public Trustee.

Sections 50–52.—Any person who obtains an order placing property in the Public Trust Office shall forthwith, under certain penalty, serve on the Public Trustee a copy of the order, and furnish full particulars of the property. The registrar or deputy registrar of clerk of courts is also directed to send to the Public Trustee a copy of the same order, with particulars of the property concerned. It is also made obligatory on corporations, associations, and persons holding any property belonging to, or who are under liabilities to, a deceased person, whose estate is being administered by the Public Trustee, to inform the Public Trustee of the same, and to disclose to him full particulars.

Sections 53–54.—The Public Trustee and his officers shall not be personally liable for any act or thing done or omitted, unless the liability shall arise from actual fraud or crime; but persons are entitled to the same remedy against the Public Trustee in his corporate capacity for any act or thing done or omitted by himself or officers that they would be entitled to against a private person, and they shall be indemnified out of the Public Trustee's Account, or, if that account is insufficient, out of moneys appropriated for the purpose by the General Assembly.

Sections 55–56.—Empower the Governor in Council to make, revoke, or alter regulations for the conduct and proceedings of the Public Trust Office. Existing powers, except as otherwise provided, are reserved.

Sections 57–62.—Deal with repeals of Acts with the necessary saving conditions.

The Schedule specifies the repealed Acts, but recites a section of one of these Acts relating to particular reserves in Auckland, which section is not repealed.

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## APPENDIX, No. 6.

PAPER handed in by Sir *Westby Perceval*, K.C.M.G., 25 March 1895.

### New Zealand Public Trust Office.

1. Trusts of any kind and executorships as to any fund cannot be taken over except on one condition, namely, that the provisions in the deed, will, or instrument allow of an investment of the capital fund in first mortgages in New Zealand, or in the stocks, funds, debentures, or securities of any British Colony, or (which has not been the case heretofore) according to the Public Trust Office Acts. This at once cuts out the great majority of these classes of instruments.

2. These classes of instruments cannot be accepted except the fund itself can be remitted or transferred in a liquid form, that is, in cash or in such securities as before indicated, as is or may be payable within the limits of the Colony of New Zealand.

3. If any deed, will, or instrument allows of complying with the foregoing, then the original or a copy should be forwarded to "The Public Trustee, Wellington, New Zealand," with a sufficient letter of advice and information for the purpose of submitting to the Office Board the application for leave to place the particular matter in the Public Trust Office. The Board (*see* second paragraph of Section 9, Public Trust Office Consolidation Act, 1894) must first consent thereto.

Assuming such consent to be given, then, where necessary, proper deeds would have to be prepared, but in all cases a petition to the Supreme Court for its consent or the consent of a judge (*see* Section 13) would be necessary. This is ordinarily prepared and conducted by the solicitors for the parties interested, the Public Trust Office not taking active cognisance until the order, with all other necessary instruments, is lodged in the Public Trust Office; but where parties are applying from the British Islands, and the matter is otherwise *pro formâ*, the Public Trustee sometimes through his office solicitor petitions. This, however, is only done in exceptional cases, and as infrequently as possible.

4. Occasionally a trust is created by settlement or otherwise in the British Islands, and the Public Trustee is appointed trustee under the instrument. This can always be done, provided—

(*a*) The consent of the Board of the Public Trust Office is obtained thereto, which consent can be given *ex post facto*.

(*b*) That the trust be of money or securities for money, to be liquidated in New Zealand and properly transferred.

Generally, the consent of the Board is never refused unless the parties previously interested seek to avoid a difficult position into which they may have gotten themselves, or litigation would appear to be, sooner or later, a possible consequence attendant on the estate or interest to be transferred.

Where it is a continuing trust which is sought to be placed in the Public Trust Office, then either the beneficiaries should consent to the accounts being made up to and approved by them at the time of transfer, or reasonable accounts rendered to the Public Trustee from which he can gather that the previous administration is apparently in order and not subject to substantive cavil.

Wellington, New Zealand,
7 December 1894.

*J. Walmsley*, Public Trustee.

## APPENDIX, No. 7.

PAPER handed in by Sir *Charles Pearson*, 28 March 1895.

REPORT by the Committee on Bills of the Society of Writers to Her Majesty's Signet on a Bill introduced in the House of Lords, intituled, "An Act to enable Incorporated Companies to act as Executors, Administrators, and Trustees, and in other Fiduciary Capacities."

Signet Hall, Edinburgh, 24 April 1889.

THE following Report was unanimously approved at a meeting of the Society of Writers to the Signet held this day.

*Chas. B. Logan*, D.K.S.

LIST OF COMMITTEE.

The Deputy-Keeper, Convener.

| | |
|---|---|
| John T. Mowbray, LL.D., Treasurer. | J. S. Fraser Tytler, LL.D., Professor of Conveyancing. |
| John Cowan, Fiscal. | John Cook, Collector of Widows' Fund. |

and

| | |
|---|---|
| David Wardlaw. | Robert Strathern. |
| A. Peddie-Waddell. | John P. Wood. |
| W. J. Menzies. | Wm. C. M'Ewen. |
| J. A. Jamieson. | S. Greig. |
| R. B. Ranken. | G. M. Paul. |
| William Macgillivray. | C. S. Rankine Simson. |
| W. J. Dundas. | Charles Baxter. |
| Henry Cook. | Ninian J. Finlay. |

REPORT.

Although this Bill expressly bears (Section 36) that the Act shall not apply to Scotland, your Committee have thought it right to report generally upon its provisions, as possibly some of the Scotch Members of Parliament may desire to have it applied to Scotland, where such companies have recently been formed, and are at this moment seeking to do business.

Your Committee understand that it is not at present illegal, either in England or Scotland, as is rather suggested by the title of the Bill, for such companies to carry on business, though they believe that any that exist have not as yet taken hold of the public confidence. This want of confidence is aptly expressed by Lord St. Leonards in one of his "Letters on Property Law," published in 1863, which your Committee may venture partly to quote. His Lordship says: "To meet these objections" (the objections felt by private persons to undertake so responsible an office as that of trustee or executor), "it was proposed by the South Sea Company upon its dissolution, and also by a private company, to obtain powers from Parliament to enable them to carry on the business of trustees and executors, for which of course they were to be paid. They were defeated in that attempt." His Lordship concludes his remarks, which were, for various reasons which he states very clearly, unfavourable to such companies, thus: "But although these projects did not succeed, yet a private company of high character was formed for the purpose of executing trusts and executorships, but limited. Such associations are not only open to all the objections which I have pointed out, but their limited liability would deter a prudent man from intrusting them with his fortune. A private trustee is liable to the extent of all his means for any loss to the fund by his mismanagement or breach of trust. And the examples of failures of joint stock banking companies, even where the shareholders are liable to the full extent of their means, are too recent and alarming not to make men hesitate to rely upon any company as their trustees and executors."

It may be, however, that the time has come when such companies will be seriously tried in this country, and may succeed in gaining the confidence of the public, as they are believed to have done in America, and thus any such Bill as the present one deserves consideration. For it is not unnatural that the very reasons given by Lord St. Leonards, as likely to deter testators from trusting such companies, may, to the minds of individuals asked to act as trustees and executors, present themselves as reasons in favour of founding such companies to relieve them of unsought and unremunerated responsibility.

The general conclusion come to by your Committee with regard to the present Bill is that it could not be made applicable to Scotland in its present form, but would require to be completely remodelled before it could be made so.

The leading features of the Bill will now shortly be referred to:—

1. The definition of a Trust Company is given (Section 2) as a company formed, or to be formed, under the Companies' Act 1862 to 1883, having for its object, or one of its objects, "to act as executor under any will, and as administrator of the effects of deceased persons, and as a trustee." No company which has not this power included in the objects mentioned in its memorandum may undertake it, and, so far as known to your Committee, there are only two such in Scotland at present.

2. Sections 3 to 11 inclusive are taken up with the various kinds of business to be done by the companies, which include that of executor, administrator, trustee under wills or settlements, or in bankruptcy, or receiver, or attorney, and the manner of their appointment to these offices is presented. Then, by Section 12, the Bill provides that these sections shall not apply to any company till it has a *minimum* subscribed capital of 100,000*l*., of which at least 50,000*l*. shall be paid up and deposited in the Chancery Court, and invested in name of the Paymaster General in some or one of the securities usually accepted by the Court for the investment of funds placed under its administration, and this deposit must remain till the company is wound up.

The object of this clause is evidently to provide a fund of security for persons trusting the company with their estates. But the defect of this, or any similar provision, seems to your Committee to be that it must obviously be impossible to ensure that any such deposit bears the proportion to the obligations of the company necessary to guarantee its solvency. Thus, supposing a company to deposit its 50,000*l*., there seems no provision in the Bill limiting the extent of its power of undertaking Trust business, and hence its obligations to its customers might be reckoned in millions, while the security was confined to its 50,000*l*. deposit. A check to this is, no doubt, introduced by the Bill (Section 13) providing for inspection of the companies' accounts by the Board of Trade, which may at any time order a further deposit. But your Committee cannot think that these deposits could ever bear the proper proportion to the obligations, without putting the company to such loss from the low rate of interest obtained upon the deposit, as to practically paralyse it. And they therefore view this as one of the probable defects in such companies, requiring to be carefully guarded against, and which, among other reasons, inclines your Committee to the opinion that it is not desirable that any such Bill as this should be hastily applied to Scotland.

3. In addition to the liability of the company's whole funds, including the Court deposit, the Bill provides (Section 19) a security of a somewhat novel kind, by declaring that whenever the company obtains probate or administration of an estate, or acts as trustee, receiver, or committee, the directors and manager of the company shall be personally responsible to the Court having jurisdiction in that behalf, and shall be personally liable by attachment to committal for contempt, or other process for the proper discharge of their duties, and for obedience to the orders of the Court.

Your Committee cannot think that the competition for seats at such a Board of Directors would be very keen amongst gentlemen of means and position.

The rest of the Bill is taken up with provisions as to the business charges to be made and accounts to be kept by the company, which call for no particular remark.

The general conclusion at which your Committee has arrived is therefore, on the whole, adverse to the existence of such companies, believing, as they do, that the wide distribution of such business which prevails under present practice is better than the concentration of it which might result from the establishment of such companies, with the defects indicated as likely to exist in their constitution ; but if legislation is to take place affecting Scotland on this subject, they are of opinion that a special Bill should be brought in for Scotland, or, if the present Bill is to be made to include Scotland, that it should be remodelled.

In name of the Committee,
*Chas. B. Logan*, D.K.S.

Edinburgh, 2 April 1889.

## APPENDIX, No. 8.

PAPER handed in by Sir *Charles Pearson*, 28 March 1895.

REPORT by the Committee on Bills of the Society of Writers to Her Majesty's Signet, on the Public Trustee Bill, Lord Chancellor, House of Lords; the Public Trustee Bill, Mr. Howard Vincent, M.P., and others, House of Commons; the Trust Companies Bill, Lord Herschell, House of Lords.

Signet Hall, Edinburgh, 1 May 1890.

THE following Report was unanimously approved of at a meeting of the Society of Writers to the Signet held this day,

(signed) *Chas. B. Logan*,
Interim Keeper of the Signet.

LIST OF COMMITTEE.

| | |
|---|---|
| The Deputy Keeper, Convener. | J. S. Fraser Tytler, LL.D., Professor of Conveyancing. |
| John T. Mowbray, LL.D., Treasurer. | John Cook, Collector of Widows' Fund. |
| John Cowan, Fiscal. | The Crown Agent. |
| and | |
| David Wardlaw. | G. M. Paul. |
| A. Peddie-Waddell. | C. S. Rankine Simson. |
| William Macgillivray. | Charles Baxter. |
| W. J. Dundas. | Ninian J. Finlay. |
| Henry Cook. | John Rutherfurd. |
| John P. Wood. | John M. Bell. |
| William C. M'Ewen. | Robert Beatson. |
| S. Greig. | J. M. Mackenzie. |

REPORT.

IT will be in the recollection of the Society that the Committee reported in April last year upon the Bill introduced into the House of Lords, intituled "An Act to enable Incorporated Companies to act as Executors, Administrators, and Trustees, and in other fiduciary capacities," and that they also reported upon another Bill, introduced also in the House of Lords, and by the Lord Chancellor, upon the cognate subject of a "Public Trustee."

Neither Bill became law, and they have again been introduced this Session in the House of Lords; the Trust Companies Bill by Lord Herschell, and the Public Trustee Bill by the Lord Chancellor, and both have now passed the House of Lords, and been brought to the Lower House.

Besides these two Bills, your Committee have also to draw attention to a "Bill to provide for the appointment of a Public Trustee and Executor," introduced by Mr. Howard Vincent, M.P., and others, in the House of Commons.

The three Bills relate to the same subject, and it seems, therefore, appropriate to report on them together. In the case of the Trust Companies Bill it is expressly stated (Section 41) that it is not to apply to Scotland, and in the case of the other two Bills that exclusion is to be inferred. Your Committee would prefer, however, that Scotland should be excluded by express enactment in each case, as these Bills, as they stand, are wholly inappropriate to Scotland, and could hardly be remodelled so as to be appropriate without great risk of confusion. If legislation of this kind is to be passed for Scotland, separate Bills would, undoubtedly, be required for it.

As the Society has so recently pronounced upon the merits of the legislation proposed by these Bills, which are in all essential points identical with Bills of last year, your Committee would, as regards the Trust Companies Bill, only refer to the general conclusion of their Report, dated 2nd April 1889, which was adopted by the Society, as still, in their opinion, representing the view which they recommended to the Society, and which was to the effect that the wide distribution of trust business which prevails under present practice is better than the concentration of it which would result from the establishment of such companies. It seems right to remark that the somewhat extraordinary provision introduced by Section 19 of last year's Bill concerning the personal responsibility of directors of such companies is not found in the present Bill.

With reference to the two Public Trustee Bills, your Committee prefer that of the Lord Chancellor to the other, though both are very much upon the same lines. But they repeat what they stated in their Report of last year, that the Bills, as they stand, are in point of form English Bills, and that the machinery which they propose is quite inapplicable to Scotland.

As regards the principle of the Bill, the question is, undoubtedly, one of difficulty. The proposed system is said to have worked well in the colonies, and to be free from risks which attach to private trusts. But, on the other hand, such trusts must be managed at considerably increased expense, and the beneficiaries will find themselves subjected to the annoyances which seem almost certain to arise from a trust worked officially by a Public Department. Moreover, in Scotland, the position of private trustees has been greatly ameliorated by the provision of Section 18 of the Judicial Factors Act of 1889, under which they may obtain from the Court of Session an order on the Accountant of Court to superintend the administration of the estate, so far as regards the investment and distribution of funds. Such an order carries with it an obligation upon the Accountant to audit the trust accounts annually, with power to get directions from the Court upon any matter which may arise in the course of the administration.

Last year the Society passed a resolution against the principle of the Bill, and the Committee now beg to report in accordance with that resolution. As, however, such an appointment is not at present being proposed for Scotland, all that seems necessary in the case of either of the two English Bills now under consideration is to endeavour at the proper stage to have a special clause inserted declaring the Act is not to apply to Scotland, and, in the case of the Lord Chancellor's Bill, that in Section 16 the first clause should be made to run thus: "The expression 'probate' includes the confirmation of an English executor to property situated in Scotland;" and that the words "and includes confirmation in Scotland," at the end of the second paragraph of that section, be deleted.

In name of the Committee,

*Chas. B. Logan*,
Interim Keeper of the Signet.

Edinburgh, 29 April 1890.

## APPENDIX No. 9.

PAPER handed in by Sir *Charles Pearson*, 28 March 1895.

REPORT by the Committee on Bills of the Society of Writers to Her Majesty's Signet on the Public Trustee Bill, Mr. Howard Vincent, M.P., and others, House of Commons. The Public Trustee (No. 2) Bill, Mr. Chancellor of the Exchequer, and others.

Signet Hall, Edinburgh, 16 March 1891.

The following Report was unanimously approved of at a meeting of the Society of Writers to the Signet held this day.

*Chas. B. Logan*, D.K.S.

LIST OF COMMITTEE.

| | |
|---|---|
| The Deputy-Keeper, Convener. | J. S. Fraser Tytler, LL.D., Professor of Conveyancing. |
| John T. Mowbray, LL.D., Treasurer. | John Cook, Collector of Widows' Fund. |
| John Cowan, Fiscal. | The Crown Agent. |
| and | |
| David Wardlaw. | John Rutherfurd. |
| William Macgillivray. | John M. Bell. |
| W. J. Dundas. | Robert Beatson. |
| Henry Cook. | J. M. Mackenzie. |
| John P. Wood. | R. L. Stuart. |
| Wm. C. M'Ewen. | Andrew Forrester. |
| S. Greig. | James Macdonald. |
| Ninian J. Finlay. | J. S. Sturrock. |

REPORT.

| | |
|---|---|
| The Public Trustee Bill. | The Public Trustee (No. 2) Bill. |

It will be in the recollection of the Society that the committee reported in April 1889 upon the Bill introduced into the House of Lords, intituled "An Act to enable Incorporated Companies to act as Executors, Administrators, and Trustees, and in other fiduciary capacities," and also upon a Bill introduced by the Lord Chancellor, upon the cognate subject of a "Public Trustee."

Neither Bill became law, and they were again introduced last Session in the House of Lords, the Trust Companies Bill by Lord Herschell, and the Public Trustee Bill by the Lord Chancellor, and both passed the House of Lords, and were introduced into but failed to pass the Lower House.

Besides these two Bills, your committee also reported last year upon a "Bill to provide for the appointment of a Public Trustee and Executor," introduced by Mr. Howard Vincent, M.P., and others, in the House of Commons.

Mr. Howard Vincent has again introduced his Bill this year, and what may be termed the Government Bill has also been reintroduced, this time in the House of Commons under the guidance of the Chancellor of the Exchequer, and it seems therefore appropriate to report on them together. In the case of both Bills the exclusion of Scotland is to be inferred. Your committee would prefer, however, that Scotland should be excluded by express enactment in each case, as these Bills as they stand are wholly inappropriate to Scotland, and could hardly be remodelled so as to be appropriate without great risk of confusion. If legislation of this kind is to be passed for Scotland, separate Bills would undoubtedly be required for it.

As the Society has so recently pronounced upon the merits of the legislation proposed by these Bills, which are in all essential points identical with the Bills of the last two years, your committee would refer to the general conclusion of their report, dated April 2nd 1889, which was adopted by the society, as still in their opinion representing the view which they recommend to the society, and which was to the effect that the wide distribution of trust business which prevails under present practice is better than the concentration of it which might result from the establishment of such an official as a public trustee.

Of the two Bills, your committee prefer that of the Chancellor of the Exchequer to the other, though both are very much upon the same lines.

As regards the principle of the Bills, the question is undoubtedly one of difficulty. The proposed system is said to have worked well in the colonies, and to be free from risks which attach to private trusts. But, on the other hand, such trusts must be managed at considerably increased expense, and the beneficiaries will find themselves subjected to the annoyances which seem almost certain to arise from a trust worked officially by a public department. Moreover, in Scotland, the position of private trustees has been greatly ameliorated by the provision of Section 18 of the Judicial Factors Act of 1889, under which they may obtain from the Court of Session an order on the Accountant of Court to superintend the administration of the estate, so far as regards the investment and distribution of the funds. Such an order carries with it an obligation upon the accountant to audit the trust accounts annually, with power to get directions from the Court upon any matter which may arise in the course of the administration.

In 1889 the society passed a resolution against the principle of the Bills, and the committee now beg again to report in accordance with that resolution. As, however, such an appointment is not at present being proposed for Scotland, all that seems necessary in the case of either of the two English Bills now under consideration is to endeavour, at the proper stage, to have a special clause inserted declaring the Act is not to apply to Scotland, and, in the case of the Chancellor's Bill, that in Section 16 the first clause should be made to run thus: "The expression 'probate' includes the confirmation of an English executor to property situated in Scotland"; and that the words "and includes confirmation in Scotland," at the end of the second paragraph of that section, be deleted, and the following words substituted, "and includes the confirmation of an English executor to property situated in Scotland."

In name of the Committee,
*Chas. B. Logan*, D.K.S.

Edinburgh, 10 March 1891.

## APPENDIX, No. 10.

PAPER handed in by Sir *Charles Pearson*, 28 March 1895.

REPORT by the Society of Solicitors before the Supreme Courts of Scotland, on the Bill for the appointment of a Public Trustee.

THIS Bill has been introduced into the House of Commons by the Government, and is similar in terms to the one introduced in the House of Lords last year by the Lord Chancellor.

The object of the Bill is to create a public functionary to be called "The Public Trustee," with large powers of administration.

There is nothing in the Bill expressly restricting its operation to England and domiciled Englishmen.

The functions of the proposed public trustee are, that "he may by that name be appointed to be trustee of any will or marriage or other family settlement, or to perform any trust or duty belonging to a class which he is authorised by General Order under this Act to accept, and may be so appointed whether the will or settlement or the instrument creating the trust or duty was made or came into operation before or after the passing of this Act, and either as an original or as a new trustee in the same cases, and in the same manner, and by the same persons or Court as if he were a private trustee, with this addition, that though the trustees originally appointed were two or more, the public trustee may be appointed sole trustee."

The public trustee is to be appointed by the Treasury, with the concurrence of the Lord Chancellor, to be "under the control and orders of the High Court," and the Lord Chancellor is to make rules for regulating the office and the carrying the Act into effect. The public trustee is to take out probate and administer wills, hold and transfer property, employ solicitors, bankers, and others, and generally exercise the powers of a trustee and executor. He may continue to employ the solicitor or banker of the deceased or of the family.

By the interpretation clause "Probate" includes the confirmation of an executor in Scotland; "Administration" means letters of administration of the estate of a deceased person, whether limited either in time or otherwise, and includes confirmation in Scotland.

There may not be any great public necessity for any such functionary in Scotland, but there is reason to apprehend that if no such functionary is appointed for Scotland, Scotchmen may be tempted by the feeling of confidence which is naturally inspired by a public department, or by the difficulty of getting friends to act as their trustees, or of disinclination to ask friends to be their trustees or executors, to name the "Public Trustee" under this Bill, if it becomes law, to be their trustee, and according to the terms of the Bill there is nothing to prevent the "Public Trustee" from acting.

This would have the effect of placing the estates of Scotchmen under the administration of Englishmen, and under the control of English Courts, and would impose upon the relatives, creditors, beneficiaries, or others interested in said estates, the inconvenience and expense of having to assert whatever rights they might have in the English Courts, involving the employment of English counsel and solicitors in addition to their own advisers in Scotland.

That would undoubtedly be regarded not only as a grievance to individuals, but also as a retrograde step in public policy.

The council do not believe that this was intended in the framing of the Bill, but in their view that will be the effect of it.

To insert a clause that it shall not be permissible for any domiciled Scotchman to take advantage of the present Act when passed would savour of provincial if not of professional prejudice, and might, moreover, lead to questions of dispute in cases where there was doubt as to the domicile, and the usual expression that this Bill shall not apply to Scotland would not exclude a Scotchman from naming the "Public Trustee" as his trustee or executor.

The opinion of the council, therefore, is that the simplest and most certain way out of the difficulty is that a Public Trustee for Scotland Bill should be introduced, placing that official under the Court of Session.

If such a functionary were appointed, he might take up the work of judicial factors and *curators bonis*, whose appointments at present lie with the Court.

In name of the Council,
*James S. Mack*, President.

Solicitors' Hall, Edinburgh, 30 March 1891.

Solicitors' Hall, Edinburgh, 7th April 1891.

Approved of at a Special General Meeting of the Society held of this date,
*James S. Mack*, President.

## APPENDIX, No. 11.

### PAPER handed in by *Lord McLaren*, 28 March 1895.

NOTES for the Guidance of Judicial Factors under the Pupils Protection, Guardianship of Infants, and Judicial Factors (Scotland) Acts. 12 & 13 Vict. cap. 51 ; 43 & 44 Vict. cap. 4 ; 49 & 50 Vict. cap. 27 ; and 52 & 53 Vict. cap. 39, issued by the Accountant of Court.

#### I. INVENTORY.

(Printed Forms will be supplied on application.)

The inventory falls to be lodged within six months from the date of the factor's bond of caution being received by the Accountant. In most cases, however, the factor is in a position to lodge it much earlier, and the accountant recommends that it be lodged for adjustment at the earliest possible date. It must be signed before lodgment. The age or date of birth of wards should be stated, and extract from register of births produced. It is of the utmost importance that the inventory be prepared with great care and distinctness, and that all the funds, subjects for rental, &c., be stated fully. It must show the estate as at the date of the factor's appointment, before he has had any intromissions therewith, or has realised any of the securities. When it is lodged with the accountant for adjustment, all the documents of debt, extract, trust-disposition and settlement (if any), leases, inventory, and valuation of furniture, &c., must be produced. All sums in bank must be instructed by (1) the deposit receipt, (2) bank pass-book certified, or (3) certificate by the bank accountant.

#### II. ACCOUNTS.

(For Form of Account *see* pages 199 and 200.)

1. Body of the Account and its Appendices.

(1.) Charge Side of an Account.—The factor should commence by charging himself with the whole estate ; that is—(1) whole funds, arrears, balances, and whatever belonged to estate according to inventory, or at the closing date of the preceding account. By this means no part of the funds can be lost sight of or omitted without affecting the balance. (2) Revenue will then follow, of whatever description, that has become payable within the period embraced by the account, including the whole rental, interest, dividends, &c., properly branched, and narrating distinctly, in each entry, the data requisite to check its accuracy ; such as dates, periods, rates of interest, or dividends, stock, amounts, &c. The main distinction is between Capital and Revenue. The elements that come under these two must never in any measure be mixed, though each branch may be more or less subdivided.

(2.) Discharge Side of an Account, branched as follows :—Public burdens, repairs, interest of debt, payments on account of the ward or beneficiaries, investments made, debt paid, improvements, expenses of management, and lastly, funds, balances, and arrears outstanding, being the actual amount and particulars of the estate as at the date on which the account closes.

2. Account-Current or Daily Balances.—Every factor of course keeps a cash-book. He should annex to his account of charge and discharge an account-current, or state of the daily balances arising on said account, which must balance with his account of charge and discharge.

3. New claims arising, or property discovered to belong to the estate after the inventory has been lodged, should be specially reported and explained in the annual account next following the discovery, and included in the charge, and, if not realised, in the last branch of discharge of the account.

4. Dates.—(1) The annual closing date must be rigidly adhered to, unless in the event of the death of the factor or ward, or of a pupil choosing curators or reaching majority, or other event terminating the factory, when the account must be closed and balanced, and the exact amount of the estate ascertained, as at that date. (2) In all accounts, whenever the nature of entries admits of it, the dates must be given. (3) False dates, or intromissions of a date subsequent to the closing date of the accounts, cannot be admitted.

5. Signatures.—Accounts must be signed by the factor, and also the states or accounts of sub-factors ; also all separate explanations, though the latter will very rarely be requisite if accounts have been accurately kept and are properly stated.

6. Vouchers.—(1) The vouchers must be properly arranged, backed, and numbered, and referred to by number in the account of charge and discharge, and not according to account-current. (2) Must refer to the factorial estate as distinct from factor's private affairs, and be accompanied by the detailed accounts (if any) of which they form the discharge. (3) The entry or narrative in the account must express the transaction in simple accordance with fact and with the vouchers, and fully. (4) Particular attention is called to the necessity, in the payment of board, of stating the name and address of the party with whom the pupil or lunatic is boarded. (5) States unsigned, or a bank account uncertified, cannot be taken as evidence. (6) A separate inventory of vouchers is not requisite. (7) Payments unvouched, or without the proper stamp, must be disallowed. (8) Vouchers are returned after the audit is completed and the fee paid.

7. Law Accounts.—All law business accounts must be taxed by the auditor of the Court of Session except in Sheriff Court procedure, when they may be taxed by the auditors of the Sheriff Court.

8. Backing

8. Backing Accounts.—The back of the account lodged should bear—(1) The name of the factor and ward or factory. (2) The exact period embraced in the account. (3) At the bottom, the reference number of the appointment. The factor or agent (if the account be attended to by an agent) is requested, in all cases, to give his precise address, in order to secure the safe transmission of documents.

9. Lodging the Account.—The annual account, with its appendices—that is, all that has to be retained and preserved when lodged at the accountant's office—should be stitched together as one paper, and thus be so complete as to be adequate clearly to inform anyone having occasion to examine it, without the vouchers, when neither the factor nor the accountant can be present to explain.

### III. Rental.

(For Form of Rental, *see* page 201.)

10. Rentals.—A rental should never be omitted from the appendix to the account. In ordinary cases, the columns requisite are (1) Names of possessions. (2) Names of tenants. (3) Arrears taken (without alteration) from last rental. (4) Rents since become due. (5) Amounts paid. (6) Arrears, exact, as on the date on which the account closes. (7) Fire insurance.

Each subject in the rental must be accounted for annually. If any subject, therefore, has been unoccupied or taken possession of by a creditor, the circumstance must be so explained. The amounts of columns No. 3 and No. 4 of the rental are carried to the factor's account, charge side, branches 1 and 2 respectively. No. 6, Arrears (if any) are included in last branch of discharge. Where the rental differs from that of the preceding year, the cause of difference should be explained.

The factor should particularly see as to the insurance against loss by fire of each subject, and the column therefore in the rental should be carefully filled in.

### IV. Audit.

11. Commission.—If none is desired, say so at the end of the account. If desired, mention the amount deemed due, and how arrived at; but do not include it in the account or take credit for it. The amount fixed by the accountant will form an item of discharge in the next annual account.

12. Interest.—(1) A certificate from the bank accountant, showing the dates of the deposit receipts, when uplifted, and the amount of interest paid thereon, must be produced. (2) Progressive interest states must be furnished, as an appendix, when interest is either charged or allowed on the account. (3) Bank interest only will be allowed a factor on cash advanced by him, if he had at his command an available factorial fund. (4) The rate of interest, and the period to which it applies and comes down, must always be stated. (5) Interest on a bank or other account current is not necessarily, and in general should not be, brought down to the closing date of the factor's account. It is enough to state the date from which it is resting, or has yet to be accounted for. (6) Factors will be charged at the rate of 20 per cent., penal interest on the balance exceeding 50*l.* in Court of Session Factories and on the balance exceeding 25*l.* in Sheriff Court Factories, remaining in their hands for more than 10 days.

13. Investments.—The Accountant is required by the Acts to "consider the investments." Besides production of the evidence of an investment, therefore, factors should, in the narrative of such an entry, briefly describe the security, its nature, position, and conditions in the account, and produce the valuations and rental of property (certified by the assessor) on which the money has been advanced. The amount of feu-duty and ground annual, and whether those have been properly allocated, should also be stated. In the case of investments on bonds over heritable property, these must be accompanied by certificates from the factor's law agent, certifying that the bonds are first securities, or otherwise, as the case may be. These valuations, certified rentals, and certificates of ranking will be retained by the accountant. The factor should invariably, at each half-yearly term, obtain production of the receipt for the feu-duty, ground annual, &c., affecting the subjects bonded, and see that the subjects are insured against fire to a sufficient amount. He requires to append a docquet at the end of each annual account, stating that he is satisfied the heritable properties over which the funds of the estate are lent are properly insured, and that he has seen the receipts for (1) premium of insurance; (2) feu-duty; and (3) ground annual for the current year. Loans over unfinished properties are not approved of. The Court do not approve of investments in shares, personal bonds, or bills, or even of the protracted continuance of such investments found by the factor on his appointment, or of the continuance of the funds in trade or business. In the case of a loan to a corporation or trust, their clerk or secretary should affix a docquet to each bond or mortgage, stating its ranking, and that it is granted within the borrowing powers of the corporation or trust. Factors must, however, observe that the responsibility of investment will rest with themselves, and that in each case full evidence must be submitted to the accountant, to enable him to judge of the validity and sufficiency of the security, and that it will be competent to him to object to any bond or mortgage if the security appears to him to be in any respect objectionable.

Investments in the following (authorised by the "Trusts (Scotland) Amendment Act, 1884") are approved of:—

(*a.*) In purchase of—

1. Any of the Government stocks, public funds, or securities of the United Kingdom.
2. Stock of the Bank of England.
3. Any securities the interest of which is or shall be guaranteed by Parliament.
4. Debenture stock of railway companies in Great Britain incorporated by Act of Parliament.
5. Preference, guaranteed, lien, annuity, or rentcharge stock, the dividend on which is not contingent on the profits of the year, of such railway companies in Great Britain as have paid a dividend on their ordinary stock for 10 years immediately preceding the date of investment.
6. Stock or annuities issued by any municipal corporation in Great Britain, which annuities, or the interest or dividend upon which stock, are secured upon rates or taxes levied by such municipal corporation under the authority of any Act of Parliament.
7. East India stock, stocks or other public funds of the Government of any colony of the United Kingdom approved by the Court of Session, and also bonds or documents of debt of any such Government approved as aforesaid, provided such stocks, bonds, or others are not payable to the bearer.
8. Feu-duties or ground annuals.

(*b.*) In loans—

9. On the security of any of the stocks, funds, or other property aforesaid.
10. On real or heritable security in Great Britain.
11. On debentures or mortgages of railway companies in Great Britain incorporated by Act of Parliament.

12. On bonds, debentures, or mortgages secured on rates or taxes levied under the authority of any Act of Parliament by municipal corporations in Great Britain authorised to borrow money on such security.

13. On Indian railway stock, debentures, bonds, or mortgages on which the interest is permanently guaranteed by the Indian Government, and payable in sterling money in Great Britain.

*See* Memorandum, page 197.

14. Report.—When lodged, the account will be audited without delay, and a draft report issued, which the factor is requested to revise and return within twenty days at latest. The factor should endeavour to clear up all difficulties in his annual account, and to embody there all that he wishes to record for his future exoneration at the accountant's office. Fragmentary and miscellaneous papers, lodged at other seasons, can rarely be of use, either at the time or at a future date. It is only once a year, in ordinary circumstances, that the position of each estate can be fully gone into and reported on.

15. Notes by the Accountant.—When the accountant issues notes, at the annual audit, the factor's additional productions or answers should be signed by him. Such separate papers, or supplementary letters, however, ought not to be requisite. They never can compensate for the neglect to lodge at the first accounts in themselves conclusive. The unnecessary expense, then or thereafter, so created, will fall upon the factor, and not upon the estate. Answers to notes should be on paper of the same size as the report; but if the notes and answers are short, the latter may be engrossed on the page opposite the notes.

## V. Special Powers.

16. Opinions.—The accountant cannot take the responsibility of giving opinions for the guidance of factors unless in the course of his duty, in the annual audit of a factor's account, or to the court in applications by factors for special powers. In the latter case, the factor proceeds in the form of a report to the accountant, mentioning the circumstances and his own views (as in a petition to the court), and concludes (as in the prayer of a petition) by stating briefly the exact powers he wishes the court to grant to him. The accountant's opinion will follow thereon. The factor then brings his report, with the accountant's opinion, by note before the court. A copy of the interlocutor, appended to the note to the court, should at once be forwarded to the accountant.

## VI. Miscellaneous.

17. The Death (with evidence of it) of a factor: change in ward's residence; ward's recovery, with date thereof; death of ward or beneficiary, with date thereof, and the death or insolvency of a cautioner, should be promptly intimated to the accountant.

18. The name and address of the cautioner and age of the ward should be stated on each annual account.

19. Fees of Audit.—When the draft report has been returned to the accountant and the audit is completed, the audit fee will immediately be intimated to the factor, and, when paid (unless in special circumstances), the whole vouchers forthwith returned. These fees are payable only in "Law Courts" stamps. Further communications with the accountant should not ordinarily be requisite until the occurrence of the audit for the year following. Special communications to the accountant should, if possible, be made only at the annual audit.

20. Income Tax Return.—In factories where the income is under 400*l.*, application should be made by the factor to the Inland Revenue authorities once every three years for return of income tax, and a note should be appended to each annual account stating the last date up to which the tax has been recovered.

## VII. Petitions for Discharge.

21. In order to facilitate these applications, and to prevent unnecessary trouble and expense to estates, the Accountant of Court calls the attention of agents to the following requisites which have now been sanctioned by the practice of years:—

1. Factors *Loco Tutoris*.—Tutors-at-Law.—Tutors Dative.

Where the factor or tutor applies for discharge at the termination of his office, *i.e.*, should the pupils choose curators on the youngest reaching minority, the accountant requires production of:—

(1.) Evidence that the minors have chosen curators, *i.e.*, the extract decree of curatory.

(2.) A discharge by the minors, with consent of their curators, acknowledging that the funds and effects under the factory have been paid over or accounted for to them. The discharge should refer, in special terms, to the funds and effects as at the termination of the office, reported on by the accountant. A convenient form is to append a state of these funds to the discharge, referring to it in the latter, and holding it as therein repeated.

2. *Curators Bonis*.—Curators-at-Law.—Judicial Factors to Lunatics.

I. Where the Ward dies Testate, the curator requires to produce—

(1.) The deceased's will, or trust-settlement, or an extract.

(2.) Confirmation of the executors acting under it.

(3.) A discharge by them to the effect above described.

II. Where the Ward dies Intestate—

(1.) Production of confirmation by the executor-dative.

(2.) A discharge by him to the effect above described.

III. Where the Ward recovers.—The curator should present a petition for recal and discharge, producing therewith medical certificates of the ward's recovery. When recal is granted, remit should at same time be obtained from the court to the accountant to audit and report. The curator's account will close as at date of recal. When the curatory has been recalled, the ward may execute a valid discharge in the terms before mentioned.

IV. Where Ward (minor) reaches majority.—A discharge to the effect above described.

3. Factors *Loco Absentis*.

1. Evidence of the identity of the ward; and

2. A discharge by him, or by his properly constituted factor or attorney, to the effect above described.

4. On Lapsed Trusts, Partnerships, &c.

On the death of the life-renter, or period for division of fee of estate, or ingathering of whole estate and division thereof, or other circumstances bringing necessity for factory to a close :—

1. Proof of death of life-renter.

2. Confirmation of executors, where necessary.

3. Discharge by fiar, or other beneficiary.

5. Recal and discharge during the Subsistence of the Office, or on the death of Factor.

1. It will be seen from the preceding notes that the factor requires to divest himself of the estate, and transfer the funds, documents of debt, and other writs to the party or parties entitled to receive and discharge the same before he can be judicially discharged.

2. It follows, also, that where a subsisting factory is sought to be terminated by the factor desiring to resign office, on account of leaving the country, or on proper cause shown, he cannot be discharged until someone has been appointed in his room in whose favour he can divest, unless consignation is ordered by the Court, and same made.

3. Where the factor dies undischarged where the purposes of the factory have not been exhausted, a new factor will be appointed by the Court, on application by parties interested, or on report by the accountant, in terms of Section 10 of the Judicial Factors (Scotland) Act, 1889, to whom the representatives of the deceased factor will fall to account.

4. It is competent to embrace in one Petition the application for recal and discharge, and for a new appointment.

6. Procedure.

It rests with the agent in all cases to transmit the process to the accountant, who will issue a draft of his proposed report for revisal. It is extremely desirable, therefore, that the case should be in all respects complete when laid before the accountant for report. When the report is signed, intimation will be given to the agent, who will transmit the process to the Bill Chamber Clerk, and enrol the case. In Sheriff-Court cases, after the report has been signed, the accountant will forward it, with the process, to the local agent in the case. When judicial discharge is obtained, the agent will procure an extract, and on exhibiting it to the accountant he will obtain delivery of the bond of caution. The case will then be written off the accountant's register.

7. Factor's Act and Warrant.

Funds, &c., furth of Scotland, in the British dominions, are by Section 13 of the Act 52 & 53 Vict., cap. 39, recoverable by the judicial factor, &c., on production of an official extract of his appointment. The Act of Sederunt of 26th November 1663, provides that the extract, if to be used furth of Scotland, is to have the seal of the Court of Session attached.

*J. Campbell Penney*,
H.M. Register House, Edinburgh, August 1893. Accountant of Court.

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MEMORANDUM as to Investment of Funds under Judicial Management in the Purchase of Colonial Government Stock, or in other Securities under and in terms of the Trusts' (Scotland) Amendment Act, 1884.

In the case of Clerk c. b. Crumpeon, a *Curator Bonis* invested part of the curatory funds, under his management, in the purchase of Stocks of the Governments of Queensland and New Zealand. The stocks purchased had previously been approved of by the Court as proper investments for trust funds (Orr, Maclean's Trustee), 20th December 1884, 12 R., 529. The accountant, however, considered it expedient to bring the matter of the curator's investment under the notice of the Court, in respect that, among other reasons, the investments were taken in the name of the curator as an individual, and not in his name as *Curator Bonis* to his ward. The case was reported to the First Division, and the Court, on 12th November 1886, issued the following interlocutor :—

"The Lords, on the report of Lord Trayner, and having heard Counsel for the *Curator Bonis*, and for the "accountant of Court—remit to the accountant to sustain the investments reported by him for consideration of the "Court."

"(signed) *John Inglis*, I.P.D."

The following is a list of stocks recently approved of by the Court :—

1. Dominion of Canada 4 per cent. Stock, redeemable 1904–8.

2. Dominion of Canada 3½ per cent. Stock, redeemable 1909–34.

3. Dominion of Canada 3 per cent. Stock, redeemable 1938.

4. Cape of Good Hope 4 per cent. Stock, redeemable 1917–23.

5. Cape of Good Hope 3½ per cent. Stock, redeemable 1929–49.

6. Natal 4 per cent. Consolidated Stock, inscribed 1937.

7. Natal 3½ per cent. inscribed Stock, 1914–39.
8. New South Wales Stock, inscribed 1933.
9. New South Wales 3½ per cent. Stock, inscribed 1924.
10. New Zealand 4 per cent. Consolidated Stock, inscribed 1929.
11. New Zealand 3½ per cent. Consolidated Stock, inscribed 1940.

In terms of the said judgment of the Court of 12th November 1886, factors may invest the funds under their charge in Colonial stocks or other stocks authorised by the Trusts (Scotland) Amendment Act, 1884, which have been authorised by the Court, subject always to approval by the accountant. But the following regulations must be attended to in making such investments :—

1. The special stocks invested in must first have been sanctioned by the Court.
2. Intimation of each investment in Colonial stocks must be made to the factor's cautioner, and written evidence of the cautioner's approval of the investment must be lodged with the accountant.
3. Where investments have been taken and registered in the factor's individual name, a certificate must be annually obtained from the Chief Accountant of the Bank of England, in the form annexed hereto, that the amount of stock stated in the factor's account as belonging to his ward, stood in the books of the bank in the name of the factor at the closing date of each of his annual accounts, and such certificate must be endorsed by the factor, in terms that will identify the stock to which the certificate applies as belonging to the ward for whom the investment was made. Where stocks are taken in name of wards, the Bank of England do not recognise factor's title to collect dividends or sell unless under authority of the English Court.
4. When the factor's account is lodged in which the investment first appears, the original receipt obtained from the seller must be lodged along with the account, endorsed by the factor, in terms that will identify the stock as belonging to the ward for whom the investment was made, and such receipt will be retained by the accountant.

Forms of certificates required are annexed. Separate forms of these will be furnished to factors on application.

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FORMS OF CERTIFICATES.

I.—By Cautioner.

I (A. B.) (designation), Cautioner for (C. D.), (Curator Bonis, or, as the case may be), to (E. F.), approve of the investment made by the said (C. D.) in the purchase of £ (describe Stock).

Date_____. Signature_____, Cautioner.

This Certificate to be endorsed in these terms—"The above Stock_____ held by me as (Curator "Bonis, or, as the case may be), for E. F. (designation)."

Date_____. Signature_____.

II.—By Chief Accountant of the Bank of England.

At the close of business on the _____ day of_____18____, the undermentioned amount of Stock_____ standing in the name against which_____placed :—

| Names of Stockholders. | Amount. | | | Name of Stock. | Date of Purchase. |
|---|---|---|---|---|---|
| | | | | | |

Date_____. Signature_____.

This Certificate to be endorsed in these terms—"The above stock_____held by me as (Curator "Bonis, or, as the case may be), for E. F. (designation)."

Date_____. Signature_____.

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## Form of Account for the Guidance of Judicial Factors.

In order to afford assistance to those factors who have not been used to the preparation of Accounts of Charge and Discharge, the following form has been prepared. The example is purposely of the most simple character, and though the entries are too briefly expressed, it illustrates the entire principle on which such an account should be stated. It assumes the pre-existence of a correct Cash-book and Rental kept by the factor. The factor must not mix any of these branches, and he must especially separate and minutely distinguish Revenue from Capital. All Vouchers must be lodged at once, and with the Account.

### Example.

No. 1165.—Account of Charge and Discharge of the Intromissions of , residing at , as Curator Bonis (or, as the case may be) to , presently residing at .—From 31st March 1889 to 31st March 1890.

The Cautioner is residing at and is alive.

*Note.*—Age of Ward or Date of Birth to be given.

### I.—Charge.

| | £. s. d. | £. s. d. | £. s. d. |
|---|---|---|---|
| I.—Estate as taken Credit for at the close of last Account. | | | |
| 1. Heritable Bond by "A. B." over lands of | | | 1,000 – – |
| 2. Balance in Royal Bank | | | 1,115 10 6 |
| 3. Household Furniture as appraised | | | 200 – – |
| 4. Balance in Factor's hands | | | 25 – – |
| 5. Arrears of Rent as taken Credit for at the close of last Account | | | 15 10 – |
| Sum £. | | | 2,356 – 6 |
| II.—Revenue. | | | |
| 1. Rents. | | | |
| 1. Current Rents, as per Rental in Appendix to this Account | | 74 – – | |
| 2. Interests. | | | |
| 1. Heritable Bond for £1,000 granted by A. B. over lands of . | | | |
| 15 May 1889. Interest at 5 per cent. for half-year to this date | 25 – – | | |
| 11 Nov. „ Interest at 5 per cent. for half-year to this date | 25 – – | | |
| | 50 – – | | |
| 2. Heritable Bond for 500*l.* granted by C. D. over House No. 3. | | | |
| 11 Nov. 1889. Interest for half-year to this date, at 4 per cent. | 10 – – | | |
| 3. Bank Account. | | | |
| 31 Dec. 1889. Interest added by Royal Bank to 31st December 1889 | 34 17 6 | | |
| | | 94 17 6 | |
| 3. Annuity. | | | |
| 15 July 1889. Received half-year's Annuity from E. F. due at this date | 25 – – | | |
| 15 Jan. 1890. Received half-year's Annuity from E. F. due at this date | 25 – – | | |
| | | 50 – – | |
| Sum | | | 218 17 6 |
| III.—Capital Realised. | | | |
| 11 Nov. 1889. Received from A. B. sum in Bond over Lands of £. | 1,000 – – | | |
| IV.—Bank Transactions. | | | |
| 15 May 1889. Drawn from Bank £. | 500 – – | | |

*Note.*—As the factor debits himself with the whole estate at the commencement of the Account, and takes credit, at the termination of the discharge, for the whole estate as then subsisting, the realisation of Capital and Bank transactions, as above, though noticed thus in an inner column, are not carried into the outer or money column. The 1,000*l.* and 500*l.* with which the factor is already debited in Branch I. of the Charge above, will be found taken credit for as invested under Branch VI. of discharge.

Sum of Charge £. 2,574 18 –

## II.—Discharge.

| | | £. s. d. | Voucher Number. | £. s. d. |
|---|---|---|---|---|
| **I.—Burdens and Repairs.** | | | | |
| 1. Burdens. | | | | |
| 25 May 1889. | Police Assessment on Property in - - | - - - | 1 | 2 7 6 |
| 31 „ „ | Fire Insurance on „ - - | - - - | 2 | 1 9 - |
| 19 June „ | Poor's Assessment on „ - - | - - - | 3 | 2 10 - |
| 19 „ „ | Property Tax on „ - - | - - - | 4 | 1 5 - |
| | | | | 7 11 6 |
| 2. Repairs. | | | | |
| 25 July 1889. | Paid James Brown for Mason Work, per Estimate - - - - - - | 5 7 - | 5 | |
| 19 Oct. „ | Paid Henry Smith for Papering House - | 3 9 - | 6 | |
| | | | | 8 16 - |
| **II.—Maintenance of Ward or Payment to Beneficiary (as case may be).** | | Sum - | - - | 16 7 6 |
| 15 April 1889. | Quarter's Board in Asylum to this date | 15 - - | 7 | |
| 15 July „ | „ „ „ „ - | 15 - - | 8 | |
| 15 Oct. „ | „ „ „ „ - | 15 - - | 9 | |
| 15 Jan. 1890. | „ „ „ „ - | 15 - - | 10 | |
| | | 60 - - | | |
| „ „ „ | Clothes, &c., furnished Ward during year - | 12 14 - | 11 | |
| | | | | 72 14 - |
| **III.—Capital Invested.** | | | | |
| 15 May 1889. | Loan to C. D. over House No. 3 - | 500 - - | | |
| 11 Nov. „ | „ G. H. over Lands of - - | 1,000 - - | | |
| | | 1,500 - - | | |
| **IV.—Bank Transactions.** | | | | |
| 31 Mar. 1890. | Paid into Royal Bank during year - - | 130 10 6 | | |
| | *See* Note, Branch IV. of Charge. | | | |
| **V.—Management.** | | | | |
| 1. Law Expenses. | | | | |
| 31 Dec. 1889. | Paid his Account for appointment of *Curator Bonis*, in the present case - | 20 13 6 | 12 | |
| | Note.—Business Accounts should be paid in full or in part, subject to taxation by the Auditor of Court. | | | |
| 2. Commission to Factor. | | | | |
| | Amount allowed by Accountant of Court at last Audit - | 5 5 - | 13 | |
| 3. Miscellaneous. | | | | |
| 15 June 1889. | Paid Travelling Expenses with Ward to Asylum, £. 1 3 - | - - - | 14 | |
| 18 July „ | Paid Accountant's Fees of Audit of last Account - - - 10 6 | - - - | 15 | |
| | | 1 13 6 | | |
| **VI.—Estate as at close of this Account.** | | | | 27 12 - |
| 1. Heritable Bond by G. H. over Lands of - - - | | 1,000 - - | | |
| 2. Heritable Bond by C. D. over House No. 3 - - - | | 500 - - | | |
| 3. Balance in Royal Bank, including interest to 31st December 1889, as per certified Bank Pass Book (or as the case may be) - - - - - - - - - - - | | 746 1 - | | |
| 4. Household Furniture as appraised - - - - - | | 200 - - | | |
| 5. Arrears of Rent outstanding as per Rental - - - - - | | 7 10 - | | |
| *Add*— | | 2,453 11 - | | |
| 6. Balance in hands of Factor - - - - - - - - | | 4 13 6 | | |
| | | | | 2,458 4 6 |
| | Sum of Discharge, Equal to the Charge - - - | £. | | 2,574 18 - |

Notes by Factor.—The Factor is satisfied that the Loans over heritable property are sufficiently secured by insurance. The receipts for (1) premium of insurance, (2) feu-duty, and (3) ground-annual for the current year have been exhibited to him.

Income Tax recovered up to

Signature of the Factor, A._____, B._____.

Date_____.

Note.—It is the special interest of each Factor thus to record, once a year, by one State of Accounts (which is carefully preserved in the Accountant's Office), a full and clear view of his management. This will avert the need of all other loose papers or correspondence, and the questions likely to arise from complicated corrections and explanations.

12.

FORM OF RENTAL.

Rental of Properties belonging to_____ for the Year ending 31st March 1890.

NOTE.—(1.) The Columns should be summed, and Numbers 3 and 4 added together, and also 5 and 6, which should agree in amount.

(2.) Lands and Tenements unoccupied, or in possession of a Bond-holder, or natural possession of the Proprietor, to be included, and the Rents stated though not carried into the Money Column.

| OCCUPANCIES. | NAMES OF TENANTS. | Arrears of Rent at close of last Account. | Current Year's Rental. | Whereof received by Factor of Columns 3 and 4. | Remains in Arrear at close of this Account. | Fire Insurance effected. | REMARKS. |
|---|---|---|---|---|---|---|---|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| | | £. s. d. | £. s. d. | £. s. d. | £. s. d. | £. s. d. | |
| No. 5, George-street - | James Johnston - - | - - | 14 10 - | 14 10 - | - - | 250 - - | |
| No. 6, Ditto - | Mrs. Baxter - - | - - | 14 10 - | 7 - - | 7 10 - | 250 - - | |
| No. 14, Wellington-place - | William Henderson - | 10 - - | 20 - - | 30 - - | - - | 320 - - | |
| No. 15, Ditto - | John Simpson - - | - - | 12 10 - | 12 10 - | - - | 200 - - | |
| No. 16, Ditto - | George Smith - - | 5 10 - | 12 10 - | 18 - - | - - | 200 - - | |
| | | 15 10 - | 74 - - | 82 - - | 7 10 - | | |
| | | | 15 10 - | | 82 - - | | |
| | | Charge - | 89 10 - | Discharge | 89 10 - | 1,220 - - | |

(Signature) _____

NOTE.—Factors should be careful not to retain in their hands a sum exceeding 50*l.* where the appointment has been made in the Court of Session, and not exceeding 25*l.* in appointments made in the Sheriff Court, at any time for a period longer than 10 days, as they render themselves liable in penal interest at the rate of 20 per cent. per annum, and which it is obligatory on the Accountant to debit to the Factor.

*See* Act 12 & 13 Vict. c. 51, s. 5, and s. 11 of Act of Sederunt, 14th January 1881.

APPENDIX, No. 12.

PAPER handed in by Sir *Charles Pearson*, 6 May 1895.

## REPORT BY THE COMMITTEE OF THE FACULTY OF ADVOCATES ON THE PUBLIC TRUSTEE AND TRUST COMPANY BILLS.

THE Committee have ascertained that of the three Bills remitted to them for consideration, the only one which is at all likely to pass, or even to receive serious consideration this Session, is the Public Trustee Bill. They have thought it desirable, therefore, to confine their attention to that Bill.

That Bill provides, Section 1 (1), for the establishment of a Public Trustee, who may, Section 1 (3), subject to the provisions of the Act, and of the rules made thereunder by the Lord Chancellor, act either alone or jointly with others, in any capacity to which he may be appointed in pursuance of the Act, and who shall have the same powers, rights, duties, liabilities, and immunities as a private trustee acting in the same capacity; and, in particular, be subject as a private trustee to the control and orders of the High Court of Chancery.

The Bill further provides, Section 2 (1), that the Public Trustee may be appointed trustee of any will, or marriage or other family settlement, or to perform any trust or duty belonging to the class, which he is authorised, by a general order to be made by the Lord Chancellor, with concurrence of the Treasury and approval of Parliament, to accept; and he may be so nominated by a truster as an original trustee, may be assumed by acting trustees as an additional trustee, or appointed by the Court as a new trustee, in the same circumstances as a private person can be so nominated, assumed, or appointed.

Provision is then made (Section 3) for the granting of probate of wills or letters of administration to the Public Trustee by that name, by the Court having jurisdiction to grant probates of will and letters of administration; and (Section 4) for the administration of small estates by the Public Trustee instead of by the Court of Chancery.

The remaining sections are chiefly of an executorial character, and it is only necessary to refer to the following:—

Section 5 provides, under limitations, for the liability of the Consolidated Fund for the fraud or negligence of the Public Trustee.

Section 6 provides for, *inter alia*, the establishment by the Public Trustee of branch offices for the transaction of business elsewhere than in London.

Section 9 provides for appeal to the High Court of Justice in England, Chancery Division, by any person aggrieved by the act or omission of the Public Trustee.

Section 13 provides for the promulgation by the Lord Chancellor, with approval of the Treasury and of Parliament, of rules for regulating the office of the Public Trustee.

And Section 16 (the interpretation clause) provides, *inter alia*, "The expression 'probate' includes the confirmation of an executor in Scotland." "The expression 'administration,' . . . . includes confirmation in Scotland."

The Committee have no doubt that the whole scope and intention of the Bill is English, and that the functions of the Public Trustee are not intended to extend to Scotland. To suppose otherwise would be to assume that an invasion by the English Court of Chancery of the jurisdiction of the Scots and Irish Courts was in contemplation, which, having regard to the Chancery rules adjusted in consequence of the international questions raised by the case of Orr Ewing *v.* Orr Ewing, 13 R. (H. L.) 1, is not an admissible assumption.

At the same time the phraseology of the Bill is such that it leaves the above to implication merely, and opens the door to a possible conflict of jurisdiction in the future which, the Committee think, ought to be expressly avoided.

This has arisen from two causes—1st, the objection of the profession in England to face the true dividing line between the jurisdictions of the Courts of different countries in the matter of the administration of estates, viz., the domicile of the truster or settlor; and 2nd, the necessity for ancillary probate or confirmation, already provided for in the general case by the Confirmation Act of 1858 (21 and 23 Vict. c. 56), where part of a trust-estate properly under the jurisdiction of the Courts of England happens to be invested or otherwise situated in Scotland or Ireland.

The Committee are of opinion that the Act should not pass without express provision against the possible conflict of jurisdiction above referred to.

The majority of the Committee are of opinion that no such provision can be adequately made without the contemporaneous creation of a similar officer in Scotland, and a proper and statutory delimitation of the functions of the proposed English and Scots Public Trustee; and they are of opinion that the creation of a Scots Public Trustee would be beneficial, and should be effected by means of a separate statute.

At the same time they think that the following modifications of the present Bill are required, completely to attain the object in view, viz. (1), In the interpretation clause to omit the paragraphs above quoted, viz., "the expression 'probate' includes the confirmation of an executor in Scotland;" and "the expression 'administration,' . . . . includes confirmation in Scotland."

(2) To add a clause somewhat in the following terms, which are an adaptation of the above-mentioned Confirmation Act, 1858, Section 14, viz., "From and after the passing of this Act when any probate or letters of administration to be granted by the Court of Probate in England to the Public Trustee as executor or administrator of a person who shall be therein, or by any note or memorandum written thereon, signed by the proper officers, stated to have died domiciled in England, shall be produced in the Commissary Court of the County of Edinburgh, and a copy thereof deposited with the clerk of the said Court, the Commissary Clerk shall endorse or write on the face of such grant a certificate in the form as nearly as may be of the schedule hereunto annexed (which schedule may be adapted from Schedule F. appended to the Act of 1858); and such probate or letters of administration being duly stamped shall be of the like force and effect, and have the same operation in Scotland, as if a confirmation had been granted by the said Court."

And (3) to add a clause to the effect, that "Except as above specially provided, this Act shall not apply to Scotland."

A considerable minority of the Committee are of opinion that there is no necessity for and would be no advantage in the creation of a Scots Public Trustee, the objects to be met by the Bill for England being either non-existent in Scotland or adequately met by existing machinery, and while they entirely agree with the majority that protection against the possible intrusion into properly Scots Trusts of the Public Trustee proposed to be created by the Bill in question should be demanded, they think that such protection would be sufficiently given by the above modifications of the present Bill. These modifications, therefore, are the unanimous suggestion of the Committee.

Advocates' Library, 18th July 1890. *Henry Johnston*, Convener.

Advocates' Library, 19th July 1890.—At a meeting of the Faculty held to-day the foregoing Report was considered and adopted.

*J. B. Balfour*, Dean of Faculty.

# REPORT

FROM THE

## SELECT COMMITTEE

ON

# WEIGHTS AND MEASURES;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

## MINUTES OF EVIDENCE,

APPENDIX, AND INDEX.

---

*Ordered, by* The House of Commons, *to be Printed,*
1 *July* 1895.

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LONDON:
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346.

## Weights and Measures.

*Ordered*,—[*Wednesday, 13th February* 1895]:—That a Select Committee be appointed to inquire whether any and what changes in the present system of Weights and Measures should be adopted.

That the Committee do consist of Seventeen Members.

Committee nominated of—

Sir John Barran.
Mr. Burt.
Mr. Crombie.
Mr. Charles Fenwick.
Mr. Alban Gibbs.
Mr. Godson.
Sir Edward Hill.
Mr. Justin M'Carthy.
Sir Samuel Montagu.
Mr. Jasper More.
Sir Albert Rollit.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Stewart Wallace.
Mr. Webster.
Mr. Whiteley.
Mr. Wrightson.

That the Committee have power to send for Persons, Papers, and Records.

That Five be the Quorum of the Committee.

*Ordered*,—[20*th March* 1895]:—That Mr. Fenwick be discharged from the Select Committee on Weights and Measures.

*Ordered*,—That Mr. Woods be added to the Committee.

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# REPORT.

THE SELECT COMMITTEE appointed to inquire whether any and what changes in the present system of Weights and Measures should be adopted;——HAVE considered the matters to them referred, and have agreed to the following REPORT:—

THEY have in the first place received evidence from witnesses representing many different interests, (1) official; (2) commercial; (3) manufacturing; (4) trade; (5) educational; (6) professional.

They have also received from numerous corporations, school boards, and other public bodies, resolutions without exception in favour of the adoption of the metrical system.

Your Committee find that, almost all the witnesses express a strong opinion as to the complicated and unsatisfactory condition of our present weights and measures, and of the distinct and serious drawback to our commerce, especially our foreign trade, which this system entails, differing as it does from the system (metrical) now adopted by every European nation except ourselves and Russia, as well as by far the majority of non-European countries with which this kingdom trades. The evidence, however, goes further to show that not only is our foreign trade, in every branch, seriously handicapped, but that the home trade would be benefited if more simple and uniform standards of weights and measures than those now existing were adopted.

Moreover strong evidence was brought forward as to the serious loss of time incurred by English school children in having to learn the complicated system of tables of existing weights and measures, and the urgent need of the adoption of a simpler system. It was stated that no less than one year's school time would be saved if the metrical system were taught in place of that now in use.

Evidence from competent witnesses proved to the satisfaction of your Committee that a compulsory change from an old and complicated system to the metrical had taken place in Germany, Norway, and Sweden, Switzerland, Italy, and many other European countries without serious opposition or inconvenience. That this change was carried out in a comparatively short period, and that as soon as the simple character of the new system was understood, it was appreciated by all classes of the population, and no attempt to use the old units or to return to the old system was made.

In the United States, where a system founded on the English units exists, a Commission is at present engaged in an investigation of the same character as that with which your Committee is charged, and the Federal Government has this year passed an Act rendering the metrical system compulsory for pharmaceutical purposes.

Your Committee believes that the adoption of the metrical system by England would greatly tend to render that system universal.

Your Committee recommend:—

(*a.*) That the metrical system of weights and measures be at once legalised for all purposes.

(*b.*) That after a lapse of two years the metrical system be rendered compulsory by Act of Parliament.

(*c.*) That the metrical system of weights and measures be taught in all public elementary schools as a necessary and integral part of arithmetic, and that decimals be introduced at an earlier period of the school curriculum than is the case at present.

1 *July* 1895.

# PROCEEDINGS OF THE COMMITTEE.

## *Tuesday*, 19*th February* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Mr. Whiteley. | Sir Samuel Montagu. |
| Mr. James Stevenson. | Mr. Alban Gibbs. |
| Sir Albert Rollit. | Mr. Wrightson. |
| Sir Henry Roscoe. | Mr. Crombie. |

Sir HENRY ROSCOE was called to the Chair.

The Committee deliberated.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

## *Tuesday*, 26*th February* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Whiteley. | Mr. Wrightson. |
| Mr. Burt. | Sir Edward Hill. |
| Mr. James Stevenson. | Mr. Stewart Wallace. |
| Mr. Godson. | Mr. Alban Gibbs. |
| Sir Samuel Montagu. | Mr. Crombie. |
| Sir Albert Rollit. | Mr. Webster. |

Mr. *H. J. Chaney* was examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

## *Tuesday*, 5*th March* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Burt. | Sir Edward Hill. |
| Mr. James Stevenson. | Mr. Alban Gibbs. |
| Mr. Godson. | Mr. Webster. |
| Sir Samuel Montagu. | Mr. Wrightson. |
| Mr. Crombie. | Mr. Stewart Wallace. |

Mr. *H. J. Chaney* was further examined.

Mr. *J. Emerson Dowson* was examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

## *Tuesday*, 12*th March* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Whiteley. | Mr. Burt. |
| Mr. James Stevenson. | Mr. Alban Gibbs. |
| Mr. Godson. | Mr. Crombie. |
| Sir Samuel Montagu. | Sir Edward Hill. |
| Mr. Wrightson. | Mr. Webster. |
| Mr. Stewart Wallace. | |

Mr. *Alexander Siemens* and General *Strachey* were examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

---

## *Tuesday*, 19*th March* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Whiteley. | Sir Samuel Montagu. |
| Mr. Burt. | Sir Edward Hill. |
| Mr. James Stevenson. | Mr. Crombie. |
| Mr. Godson. | Mr. Alban Gibbs. |
| Sir John Barran. | Mr. Wrightson. |

Mr. *Alfred Spencer* and Mr. *A. J. Street* were examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

---

## *Tuesday*, 26*th March* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Whiteley. | Mr. Wrightson. |
| Mr. Burt. | Sir Edward Hill. |
| Mr. James Stevenson. | Mr. Crombie |
| Mr. Godson. | Mr. Stewart Wallace. |
| Sir Samuel Montagu. | |

Mr. *H. E. Wollmer* and Mr. *W. Debenham* were examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

---

## *Tuesday*, 2*nd April* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Sir Samuel Montagu. | Mr. Burt. |
| Sir John Barran. | Mr. Jasper More. |
| Mr. Godson. | |

Captain *H. R. Sankey*, R.E., and Dr. *Gladstone* were examined.

[Adjourned till Tuesday, 30th April, at a Quarter before Three o'clock.

---

*Tuesday, 30th April* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Burt. | Sir John Barran. |
| Mr. Jasper More. | Sir Samuel Montagu. |
| Mr. James Stevenson. | Sir Edward Hill. |

Professor *Prytz*, Mr. *Charles Umney*, and Mr. *David Howard* were examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

---

*Tuesday, 7th May* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Jasper More. | Mr. Wrightson. |
| Mr. Godson. | Sir Edward Hill |
| Mr. James Stevenson. | Mr. Webster. |
| Sir John Barran. | Mr. Alban Gibbs. |
| Sir Samuel Montagu. | |

Mr. *F. H. Lenders*, Mr. *John Shuker*, and Mr. *H. C. Woodward* were examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

---

*Tuesday, 14th May* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. James Stevenson. | Mr. Alban Gibbs. |
| Sir Samuel Montagu. | Mr. Godson. |
| Sir Edward Hill. | Sir John Barran. |
| Mr. Stewart Wallace. | Mr. Jasper More. |
| Mr. Wrightson. | Mr. Webster. |

Mr. *W. T. Rowlett*, Mr. *John G. Pilter*, and Mr. *E. Johnson* were examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

---

*Tuesday, 21st May* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Jasper More. | Sir Edward Hill. |
| Mr. James Stevenson. | Mr. Wrightson. |
| Mr. Godson. | Mr. Crombie. |
| Sir John Barran. | Mr. Webster. |
| Sir Samuel Montagu. | |

Mr. *Stewart Wallace* (a Member of the Committee), Mr. *R. Giffen*, Mr. *A. T. Pollard*, and Mr. *M. Carteighe* were examined.

[Adjourned till Tuesday next, at a Quarter before Three o'clock.

---

*Tuesday*, 28*th May* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. Jasper More. | Sir Edward Hill. |
| Mr. James Stevenson. | Mr. Webster. |
| Mr. Godson. | Sir John Barran. |
| Sir Samuel Montagu. | Mr. Burt. |
| Mr. Wrightson. | Mr. Alban Gibbs. |

Sir *Frederick Bramwell*, F.R.S., Sir *Benjamin Baker*, F.R.S., and Mr. *S. Uttley* were examined.

[Adjourned till Tuesday, 25th June, at a Quarter before Three o'clock.

---

*Tuesday*, 25*th June* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. James Stevenson. | Mr. Webster. |
| Sir Edward Hill. | Mr. Jasper More. |
| Mr. Godson. | Sir Albert Rollit. |
| Sir Samuel Montagu. | Mr. Wrightson. |
| Mr. Alban Gibbs. | |

Dr. *T. Egleston*, Mr. *James Stevenson* (a Member of the Committee), Mr. *C. T. Howard*, and Mr. *Thomas Kyle* were examined.

[Adjourned till Thursday, at a Quarter before Three o'clock.

---

*Thursday*, 27*th June* 1895.

MEMBERS PRESENT:

Sir HENRY ROSCOE in the Chair.

| | |
|---|---|
| Mr. James Stevenson. | Mr. Crombie, |
| Mr. Godson. | Sir Albert Rollit. |
| Sir Samuel Montagu. | Mr. Alban Gibbs. |
| Mr. Webster. | Sir John Barran. |
| Sir Edward Hill. | |

The Lord *Kelvin*, attending by permission of the House of Lords, was examined.

DRAFT REPORT, proposed by the *Chairman*, read the first time, as follows:—

"1. THEY have, in the first place, received evidence from witnesses representing many different interests, (1) official; (2) commercial; (3) manufacturing; (4) trade; (5) educational; (6) professional.

"2. Your Committee find that, with a single exception, all the witnesses express a strong opinion as to the complicated and unsatisfactory condition of our present system of weights and measures, and of the distinct and serious drawback to our commerce, especially our foreign trade, which this system entails, differing as it does from the system (metrical) now adopted by every European nation except ourselves and Russia, as well as by far the majority of non-European countries with which this kingdom trades. The evidence, however, goes further to show that not only is our foreign trade, in every branch, seriously handicapped, but that the home trade would be benefited if more simple and uniform standards of weights and measures than the existing ones were adopted.

"3. Moreover, strong evidence was brought forward as to the serious loss of time incurred by English school children, in having to learn the complicated system of tables of existing weights and measures, and the urgent need of the adoption of a simpler system. It was stated that no less than one year's school time would be saved if the metrical system were taught in place of that now in use.

"4. Evidence from competent witnesses proved to the satisfaction of your Committee that a compulsory change from an old and complicated system to the metrical one had taken place in Germany, Norway, and Sweden, Switzerland, Italy, and many other European countries without opposition, and without any serious inconvenience being felt. That this change was carried out in a comparatively short period, and that as soon as the simple character of the new system was understood, it was appreciated by all classes of the population, and no attempt to use the old units or to return to the old system was made.

"5. In the United States, where a system founded on the English units exists, a Commission is at present engaged in an investigation of the same character as that with which your Committee is charged, and the Federal Government has this year passed an Act rendering the metrical system compulsory for pharmaceutical purposes.

"Your Committee believe that as soon as England adopts the metrical system, Russia and the United States will also adopt the same system, which then will be universal throughout the world.

"6. Hence your Committee recommend:—

"(*a.*) That the metrical system of weights and measures be at once legalised for all purposes.

"(*b.*) That after a lapse of two years the metrical system be rendered compulsory by Act of Parliament.

"(*c.*) That the metrical system of weights and measures be taught in all public elementary schools as a necessary and integral part of arithmetic, and that decimals be introduced at an earlier period of the school curriculum than is the case at present, and before vulgar fractions."

DRAFT REPORT, proposed by Mr. *James Stevenson*, read the first time, as follows:—

"1. The only previous occasion on which the expediency of a fundamental change in the standard weights and measures in use by the English-speaking races of the world was made the subject of inquiry by a Committee of the House of Commons was in the year 1862. Since then the language of the metrical system has been made legal in contracts, and the equivalents of the Imperial system in the metric system recognised, and numerous steps have been taken in the administration of the Standards Department of the Board of Trade for the verification of metric standards and the increased efficiency of the inspection of weights and measures of the Imperial system throughout the country by the local authorities. The Board of Trade have also sanctioned the use of the cental of 100 lbs. avoirdupois; have abolished the troy pound as a legal standard, and provided a series of standard troy weights, from the one-thousandth part of a troy ounce to 500 troy ounces. The troy ounce retains its place in the weighing of the precious metals, and the price of silver per troy ounce is daily quoted, and the richness of gold-bearing quartz is stated in troy ounces per ton avoirdupois of mineral.

"2. Since 1862, the substitution of the metric system of weights and measures has been twice before the House of Commons, and on each occasion the proposal has been defeated.

"3. When the replacement of the old copper coinage by the present bronze coinage was carried through by the Government, the new bronze coins were linked to the Imperial system of weights and measures in so far that the new penny, halfpenny, and farthing were required to be of the weight of one-third, one-fifth, and one-tenth of an avoirdupois ounce. The usefulness of this provision was much impaired by the weights not being stamped on the coins themselves.

"The new bronze halfpence were and have ever since been coined exactly of the diameter of an Imperial inch.

"4. The Committee of 1862 reported in favour of the adoption of a decimal coinage as a necessary preliminary to the adoption of the metric system of weights and measures.

"5. The new Decimal Association, who are promoting the present inquiry, confine their efforts to the introduction of the metric system of weights and measures. The question of decimal coinage has not been within the reference to the Committee.

"6. Witnesses at former inquiries and before this Committee have used very strong expressions as to the incongruous and anomalous character of the Imperial system of weights and measures. This objection, when examined, resolves itself into this, that the divisions and multiples of the Imperial units are not always on a decimal basis.

"7. In the Second Report of the Standards Commission, dated 3rd April 1869, paragraph 6, the Commissioners remark that: 'In the statements introductory to the proposals for new systems

systems in France, North Germany, and India, very great stress is laid upon the discordance in the fundamental units of their customary weights and measures as adopted in different parts of the same empire. These reasons have no force in Great Britain and Ireland, throughout which, whatever difference may prevail as to the multiples in local use, the fundamental units, namely, the yard, the pound, the gallon, are strictly the same, based upon national standards which are constructed with the utmost skill and care.'

"In paragraph 9 they say: 'The natural inclination of the mind to half and quarter continually exhibits itself in the sub-division of almost every base. The metric system does not afford the same facility, either for change of the adopted base or for the continued binary sub-division, and any attempt to force it into use in shops and into workmen's operations, and their accounts, would probably be felt as a needless grievance.'

"In paragraph 11 they say: 'It is obvious that in this country, where the people are more accustomed to self-government than in other European countries, the executive has far less power of compelling obedience to the law in all the small transactions of trade against the wish of the public.'

"8. In recent years use has been made of the facilities provided by the Board of Trade for the verification of metrical standards for use in science, and the preparation and packing of goods for foreign countries where the metric system prevails.

"9. Some doubt was raised by witnesses before the Committee as to the legality under the Act of 1878 of this facility, but no case was adduced of any prosecution of traders who used metric standards for foreign business, and the London County Council have ordered their inspectors of weights and measures not to prosecute in such cases. The supposed permission has been largely used, especially in preparing drugs for exportation to metric countries.

"The Decimal Association have sought the opinion of British consuls at various foreign ports as to the benefit to foreign trade if this country adopted the metric system. Their replies generally admit that the diversity of standards is a hindrance to trade, but many of them attach far more importance to the indisposition of the English trader to adapt himself to the language and customs of the foreign country.

"On the other hand, the Committee have evidence that many manufacturers and traders prepared their goods, and published their price lists and catalogues, in order to cultivate trade with the metric countries.

"10. The Committee feel that, beyond removing any doubt as to the legality of the use of metric standards for such trade, no legislation is required for the encouragement of trade with metric countries.

"11. The Committee received much evidence as to the increasing practice of the decimalisation of the existing Imperial standards for which no legislation is required.

"Much of the evidence in favour of the abolition of the Imperial system was based on the assumption that England and the United States must inevitably follow the example of most European nations, and abandon the isolated position which the English-speaking race occupied among civilised nations. The Committee cannot accept such a view as well founded.

"12. The Committee had many opinions expressed before them in favour of the teaching of the metric system in elementary schools with the view of preparing the minds of the people for the compulsory introduction of that system and the displacement of the Imperial system. It seems to the Committee premature that the Education Department should lay it down in their code that children 'should know the principles of the metric system, and be able to explain the advantages to be gained from uniformity in the method of forming multiples and sub-multiples of the unit.' It seems to the Committee very questionable that the Education Department should be used as the propaganda of a fundamental change of the Imperial system of weights and measures which Parliament has refused to entertain.

"13. The Committee at the same time found that instruction in the basis of the Imperial units, such as the relation of weight to measure, the pound weight being one-tenth of a gallon, and that an ounce, approximately, the one-thousandth part of a cubic foot of water, is very much neglected in schools, although a knowledge of these facts is of great practical utility in manufacturing industry."

Question proposed, That the Draft Report, proposed by the *Chairman*, be read a second time, paragraph by paragraph.—(The *Chairman*.)

Amendment proposed, to leave out the word "Chairman," and insert the words "Mr. James Stevenson."—Question put, That the word "Chairman" stand part of the Question—(Mr. *James Stevenson*).—The Committee divided:

| Ayes, 6. | Noe, 1. |
|---|---|
| Mr. Crombie. | Mr. James Stevenson. |
| Mr. Alban Gibbs. | |
| Mr. Godson. | |
| Sir Edward Hill. | |
| Sir Samuel Montagu. | |
| Mr. Webster. | |

DRAFT REPORT, proposed by the *Chairman*, read a second time, paragraph by paragraph.

Paragraph 1.—Amendment made.

Another Amendment proposed, at the end of the paragraph as amended, to add the words "No witnesses were called to represent numerous classes of the community, wholesale and retail traders, and their customers, whose transactions in daily life would be disturbed by the compulsory abolition of the long familiar standards, and who had expressed no desire for a change"—(Mr. *James Stevenson*).—Question, That those words be there added,—put, and *negatived*.

Paragraph as amended, *agreed to*.

Paragraph 2, amended, and *agreed to*.

Paragraph 3, *agreed to*.

Paragraphs 4—5, amended, and *agreed to*.

Paragraph 6.—Amendment made.

Another Amendment proposed, in line 4, to leave out the words "after a lapse of two years," and insert "on January 1st, 1900"—(Mr. *Webster*).—Question put, That the words proposed to be left out stand part of the paragraph.—The Committee divided:

| Ayes, 5. | Noes, 4. |
|---|---|
| Sir John Barran. | Mr. Crombie. |
| Mr. Alban Gibbs. | Sir Albert Rollit. |
| Mr. Godson. | Mr. James Stevenson. |
| Sir Edward Hill. | Mr. Webster. |
| Sir Samuel Montagu. | |

Another Amendment made.

Question put, That the paragraph, as amended, stand part of the Report.—The Committee divided:

| Ayes, 6. | Noes, 2. |
|---|---|
| Sir John Barran. | Mr. Crombie. |
| Mr. Alban Gibbs. | Mr. James Stevenson. |
| Mr. Godson. | |
| Sir Edward Hill. | |
| Sir Samuel Montagu. | |
| Sir Albert Rollit. | |

Question, That this Report, as amended, be the Report of the Committee to the House,—put, and *agreed to*.

*Ordered*, To Report, with the Minutes of Evidence, and Appendix.

## EXPENSES OF WITNESSES.

| NAME OF WITNESS. | PROFESSION OR CONDITION. | From whence Summoned. | Number of Days Absent from Home under Orders of Committee. | Allowance during Absence from Home. | Expenses of Journey to London and Back. | TOTAL Expenses allowed to Witness. |
|---|---|---|---|---|---|---|
| | | | | £. s. d. | £. s. d. | £. s. d. |
| Mr. John Shuker - | Farmer - - - | Montgomery - - | 3 | 2 5 – | 1 14 4 | 3 19 4 |
| Mr. Harvey C. Woodward. | Ex-President, Chamber of Commerce. | Liverpool - - - | 2 | 2 2 – | 3 3 – | 5 5 – |
| Mr. W. T. Rowlett - | Yarn Agent - - | Leicester - - - | 1 | 1 1 – | 1 11 – | 2 12 – |
| Mr. S. Uttley - - | Tradesman - - | Sheffield - - - | 1 | – 15 – | 1 10 2 | 2 5 2 |
| Mr. T. Kyle - - | Inspector of Weights and Measures. | Aylesbury - - - | 1 | – | – 11 5 | – 11 5 |
| | | | | | £. | 14 12 11 |

# MINUTES OF EVIDENCE.

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# MINUTES OF EVIDENCE.

*Tuesday, 26th February* 1895.

MEMBERS PRESENT :

Mr. Burt.
Mr. Crombie.
Mr. Alban Gibbs.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Sir Albert Rollit.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Stewart Wallace.
Mr. Webster.
Mr. Whiteley.
Mr. Wrightson.

SIR HENRY ROSCOE IN THE CHAIR.

Mr. H. J. CHANEY, called in ; and Examined.

*Chairman.*

1. YOU are, I believe, the Superintendent of the Standards Department of the Board of Trade?—I am Superintendent of Weights and Measures.

2. Will you kindly give the Committee some information as to the foundation of your department, and as to the objects which it has in view. When was your department first constituted?—In 1866; and if the Committee will allow me I will read Section 33 of the Weights and Measures Act of 1878, with reference to the present duties and powers of the department: "The Board of Trade shall have all such powers, and perform all such duties relative to standards of measure and weight, and to weights and measures, as are by any Act or otherwise vested in or imposed on the Treasury, or the Comptroller General of the Exchequer, or the Warden of the Standards; and all things done by the Board of Trade, or any of their officers, or at their office, in relation to standards of weights and measures in pursuance of this Act shall be as valid, and have the like effect and consequence, as if the same had been done by the Treasury, or by the Comptroller General or other officer of the Exchequer, or by the Warden of the Standards, or at the office of the Exchequer. It shall be the duty of the Board of Trade to conduct all such comparisons, verifications, and other operations with reference to standards of measure and weight, in aid of

*Chairman*—continued.

scientific researches or otherwise, as the Board of Trade from time to time thinks expedient, and to make from time to time a report to Parliament on their proceedings and business under this Act."

3. Then the Act makes provision with regard to the custody and verification of standard and copies; are these matters within your jurisdiction?—The standards are kept at the Standards Department of the Board of Trade, and copies of them are verified from the different local authorities throughout the United Kingdom as well as for use abroad in various colonies, and also for scientific purposes.

4. Your department undertakes not only the custody, but the periodical verification of standards as to weights and measures, does it not?—Yes.

5. I understand that your department carries out more completely the arrangements which formerly were carried out by the Comptroller General or by the Warden of the Standards at the office of the Exchequer?—That is so. The duties imposed on the Treasury and the Exchequer were transferred to the Board of Trade, and the powers much enlarged in matters of local inspection.

6. Could you inform the Committee how the verification by the Board of Trade of local stand-

*Chairman*—continued.

ards takes place?—The standards of the different local authorities are sent to the Standards Office, 7, Old Palace-yard, at certain periods; the standard weights once in five years and the standard measures once in 10 years, and are re-verified by comparison with the Imperial Standards, which are kept at 7, Old Palace-yard.

7. The copy of the original standard is immured in the walls of the Houses of Parliament, is it not?—Yes.

8. Your standards are the yard and the standard platinum pound of 7,000 grains, are they not?—That is so.

9. These are, I understand, verified or controlled every 20 years, are they not?—Yes, the copies of the original standards so immured.

10. By whom is that control or verification made?—It takes place under the direction of the Board of Trade.

11. By certain experts who are appointed for the purpose?—Yes; the last verification was undertaken by myself in 1892.

12. Another verification will not occur for 20 years after that time?—That is so.

13. That being the object of your Department, will you give the Committee some account of the different systems of weights and measures now legal in the United Kingdom, first of all as regards the Imperial system, that is to say, the fundamental unit of the pound and the yard?—The Imperial system of weights and measures is based on two standards only, the pound weight and the yard measure, and from those two are derived all other weights and measures in use in this country in connection with the Imperial system. The gallon, for instance, is a derived standard containing ten pounds weight of distilled water at a temperature of 62°. Troy weight is derived from the avoirdupois weight; a troy ounce containing 480 grains, of which the Imperial pound contains 7,000 grains. The decimal series of troy ounce weights from 500 ounces to a thousandth of an ounce legalised in 1855 are similarly derived from the Imperial pound of 7,000 grains. Apothecaries' weight, which is more largely used perhaps than troy weight, is also derived from the avoirdupois pound of 7,000 grains, the apothecaries' ounce containing 480 grains, like the troy ounce. There are various other derived standards not of large importance, as to use; for instance, the cental of 100 pounds, which was legalised by Order of Council in 1879. The standard yard is a standard only at the temperature of 62 degrees Fahrenheit; and the foot and the inch are derived from it. The standard of weight is determined in a given latitude.

14. In the latitude of London, is it not?—Of Westminster.

15. The weight of the pound, of course, varies according to the latitude?—Yes, the standard of mass depends on the force of gravity; the length of the yard does not depend on the latitude, but on the temperature.

16. Whilst the unit of length depends on the temperature, the unit of weight depends on the latitude of the place?—Yes.

*Chairman*—continued.

17. Will you explain in what way the Imperial system is partly binary, partly decimal, and partly duodecimal?—It is binary with regard to the multiples and parts and units; for instance, in every shop throughout the United Kingdom one finds weights of a binary series; 56, 28, 14 lbs., 8, 4, 2, and 1 ounces.

18. And duodecimal?—The old series of troy weights, 12, 6, 3, 2, and 1 ounces.

19. And decimal?—The decimal series of grain weights legalised in 1878 of 4,000, 2,000, 1,000 grains to 1,000th of a grain.

20. For what are these, particularly the decimal system of grain weights, employed?—For pharmaceutical and chemical purposes generally. The decimal series and troy weights to which I have referred were legalised in 1855.

21. Whereas the Imperial system was legalised in what year?—The present "Imperial" pound, avoirdupois, was first legalised in 1855 only. Before that, since 1495, the legal standard in this country was the troy pound. The "Imperial" standard yard was first made legal in 1824, but a yard was originally legalised by an Act of 1324.

22. Will you describe to the Committee the method by which these fundamental units to which you have referred, namely, the pound and the yard, were obtained, the principle on which they were founded; first, taking the yard, is there any physical principle upon which the length of the standard yard was ascertained and determined?—From no physical principle. The length of the yard was originally fixed in 1824 by the Act 5 George IV. c. 74, as compared with a seconds pendulum; but it was shown by the Standards Committee in 1841 that that system could not be referred to. The yard measure at the present time, like the metre at Paris, is merely an arbitrary standard, being the length of a certain bar of metal. The pound is not a physical constant, it is the weight of a piece of metal made of platinum, deposited with the Board of Trade.

23. And, in fact, the only method by which we can arrive at accurate standards is by comparison of a certain given length measured, and of a certain given weight under given conditions, is it not?—That is so.

24. The metre is not as it was intended to begin with, one ten-millionth part of the arc, and the metre in Paris does not actually correspond to the later measurements of that arc?—No.

25. So that, as you say, all these measures we may call artificial standards. What designation would you give to it?—There have been so many attempts to introduce natural constants, or physical constants, that perhaps arbitrary standards might be the proper name.

Sir *Albert Rollit.*

26. Would it not be more correct, then, to describe the real standard as the one at the Board of Trade, though the one embedded in this House is the statutory standard?—The term "statutory" would very well cover all the standards known as Imperial standards. It would cover

Sir *Albert Rollit*—continued.

cover the Parliamentary copy, as it is called, which is deposited in the Houses of Parliament.

*Chairman.*

27. But it would not cover the other standards which are not statutory, or any other weights and measures which may not be statutory, would it?—I suggest that it would cover any standards, if such were allowed by law.

28. Have you any other remarks to make, either with regard to the fundamental units of the Imperial system, or their derived units?—None.

29. What is the next system to which you wish to direct the attention of the Committee?—The metric system. The expressed or written use of the metric system has been permitted in this country since the year 1864. The use of physical metric weights and measures, such as those on a counter of a shop, is illegal, although the use of metric weights, &c. for written purposes in contracts is legal.

30. Will you explain fully what you mean by that. Will you give us a concrete instance. Supposing, for example, one were to go into a shop; will you continue the illustration if you can?—If I go into a shop and ask for a kilogramme of flour, the seller must not use a metric kilogramme weight to weigh up that flour by.

31. But he must use pounds and ounces and grains until he gets the proper weight of the kilo?—Yes; and on the other hand it is quite legal for two parties, a manufacturer and a merchant, to buy and sell by the metric system when expressed in a contract. It is legal, for instance, to sell so many thousand metres of cotton on a written contract.

32. Is it legal to have metric weights for one's own purposes if one has contracts, say, with a foreigner?—I hesitate to answer that, as it involves a matter of legal construction of the Act.

33. With regard to the fundamental units of the metric system, the kilogramme and metre, to which we have already referred, what have you to say?—A kilogramme is the weight of a piece of platinum deposited with the International Committee of Weights and Measures at Paris.

34. You say the kilogramme is the weight of platinum deposited in the archives at Paris?—Deposited with the International Committee at Paris. The Kilogramme des Archives is no longer a standard; it was made illegal by the Metric Convention of 1875.

35. With regard to the derived units, of course there are in this system derived units as well as in the Imperial system; what have you to say with regard to those?—There are fewer derived units under the metric system than under the Imperial system. The only one derived unit to which I would refer is the unit of capacity, the litre.

36. That, of course, has a distinct relation to the measures of length and of area, the litre being the cubic contents of a cubic decimetre; is not that so?—That is not so now. Since the



*Chairman*—continued.

year 1875 the litre has been defined as the kilogramme weight of distilled water contained in the litre measure at a temperature of four degrees centigrade, and not as the weight of water contained in a cubic decimetre.

37. Will you explain to us the reason why this change has been made?—Because it has been found difficult to make a cubic decimetre with sufficient accuracy; it is a mechanical difficulty.

38. And to fill it with water?—Yes.

39. Then the litre, like the kilogramme, and like a metre, becomes what you have stated to be an arbitrary unit; is that so?—Yes, in that sense, it is so.

40. So that not only the standard of length and the standard of weight, but also the standard of capacity, becomes, in the metrical system, an arbitrary unit?—Yes, the unit of capacity may appear to some to be less arbitrary, because it has a physical definition, as the weight of a given volume of water contained in a certain vessel.

41. At a given temperature?—Yes, at 4° centigrade.

42. Have you any other remarks to make with regard to the standard of these systems; I have not asked you any questions as to the application either of the Imperial system or the metrical system at present; but, with regard to the standard, have you any other remarks to make?—No, excepting as to their original history.

43. You have told us about the Imperial system?—Yes.

44. Can you give us the history of the metrical system; in the Report of the Committee on Weights and Measures of the 15th July 1862, there is a very elaborate account of the history of the metrical system; still, I think it is very desirable to hear from you, as an authority upon the subject, a short account of the origin of the metrical system?—The system had its origin in 1790, when an attempt was made to introduce international standards, based on certain geodetic measurements, carried out in Peru and elsewhere. Those measurements led up to a measurement of the meridian passing through Paris. The result of that measurement was the appointment of a Committee by the French National Assembly, and that body, by decree of 1793, made the use of metric weights and measures, based on the metre or ten-millionth part of the meridian passing through Paris, the only legal system in France. In 1794 the Mètre des Archives, and the Kilogramme des Archives, were finally constructed and deposited in the Archives of Paris. The system was made absolute until the year 1801, when, by French law, the old French weights and measures were again permitted to be used.

45. And a very complicated system, or want of system that was, was it not?—Yes, the two systems remained in force until 1840, when the French finally made the use of the metric system compulsory. In 1818, an international comparison of the French metre and the yard was made (under a resolution of the House of Commons, dated 15th March 1816) by Captain Kater and M. Arago.

*Chairman*—continued.

46. But the matter did not go any further, did it?—No; and since the time of the comparison by Kater and Arago no comparison has been made of the yard measure and metre.

47. Do you say that the Imperial system and the metric system are the only two systems with which we have to do in England?—They are the only two systems, but there are other local and customary weights and measures also in use in this country.

48. Can you give the Committee a list of the public statutes relating to weights and measures?—I beg to hand in a list of Acts of Parliament relating to weights and measures. This list includes the two principal public statutes, the one of 1878 and the one of 1889; and also a number of other Acts of Parliament referring to weights and measures, or to particular units used for particular purposes.

49. Will you shortly state their number?—Besides the main Public General Statutes of 1878 and 1889, there are the Weights and Measures Acts of 1892 and 1893, referring to a matter of local administration; the Coal Mines Regulations Act of 1887, referring to the inspection of weights and measures in coal mines; the Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891, referring to the weighing of cattle at auction marts; the Factory and Workshop Act of 1878, referring to the weights and measures to be used in the payment of wages; the Burgh Police (Scotland) Act, 1892, referring to the inspection of weights and measures in Scotland; the Sale of Gas Act, 1859, prescribing the measures to be used in the quantitative measurement of gas; the Gas Works Clauses Act, 1871, giving the measure to be used in testing the illuminating power of gas; the Coinage Act of 1870, giving the weights and measures, both Imperial and metric, to be used in weighing the coins of the Realm; the Sale of Coal (Metropolis) Act, 1831 (a local but important Act, as it led up to subsequent legislation regulating the sale of coal by weight); the Sale of Bread Act, 1836; the Sale of Bread Act (Ireland), 1822; the Intoxicating Liquors Act, 1872, regulating the sale of intoxicating liquors by Imperial measure; the Corn Returns Act, 1882, requiring corn returns to be made by the Imperial bushel; the Merchandise Marks Act, 1887, referring to false trade description as to quantity, gauge, or weight; the Sale of Hay and Straw Acts, 1796, a London Act requiring trusses of hay and straw to be of specified weight, and the Burgh Police (Scotland) Act of 1892, also dealing with the weight of trusses of hay and straw.

50. Is that the Act passed in consequence of the Report of the Corn Committee which sat in 1892, or is it a separate one?—No, I have not mentioned the Committee of 1892, as there has been no legislation on the recommendations of that Committee.

51. Those being the existing public statutes relating to weights and measures, will you now give the Committee shortly an account of what has been done during the last 30 years, let us say, with regard to the question which the Committee have to report upon,—I mean with regard to the question generally of weights and measures, in order that the members of the Committee may be aware of what steps, what investigations, and what reports have been sent in. In the first place, have you anything to tell the Committee of what happened before the Report, which I hold in my hand, was published in July 1862; do you think it is necessary to go beyond that date?—I do not think it is.

52. Then commencing with that date, will you shortly tell this Committee the result of the Report of that Committee?—The Select Committee on Weights and Measures in 1862 made 11 important recommendations.

53. I will not read them, but I will state the substance of them. The first of these, to take it shortly, was, was it not, that the use of the Metric System be rendered legal?—Yes.

54. Then, in the next place, that the Department of Weights and Measures be established in connection with the Board of Trade. That I understand is your Department?—Yes.

55. It was on the recommendation of this Committee that your Department was founded, was it not?—Yes.

56. Then that "The Government should sanction the use of the Metric System (together with our present one) in the levying of the Customs Duties; thus familiarising it among our merchants and manufacturers, and giving facilities to foreign traders in their dealings with this country. Its use, combined with that of our own system, in Government contracts, has also been suggested." Then No. 4 is, "The Metric System should form one of the subjects of examination in the competitive examinations of the Civil Service"?—Yes.

57. No. 5 is, "The gramme should be used as a weight for foreign letters and books at the Post Office." No. 6 is, "The Committee of Council on Education should require the Metric System to be taught (as might easily be done by means of tables and diagrams) in all schools receiving grants of public money." Then No. 7 is, "In the public statistics of the country quantities should be expressed in terms of the Metric System in juxtaposition with those of our own, as suggested by the International Statistical Congress." Can you tell us what that International Statistical Congress was which is referred to here?—I regret I am unable to do so.

58. No. 8 is, "In Private Bill before Parliament, the use of the Metric System should be allowed." Then No. 9 is, "The only weights and measures in use should be the Metric and Imperial, until the Metric has been generally adopted." No. 10 is, "The proviso (already noticed) in the 5th and 6th William 4 chapter 63, clause 6, should be repealed," and that "The Department which it is proposed to appoint should make an annual report to Parliament." Do you report annually?—An Annual Report is laid before Parliament, stating the proceedings and business of the Standards Department during the past year.

59. Have you anything to tell the Committee about

*Chairman*—continued.

about the Royal Commission on Standards, which sat in the year 1869?—After the Report of the Committee of 1862, the next step, before the appointment of the Royal Commission of 1869, was the passing of the Standards Act of 1866, giving effect to one of the recommendations of this Committee, and also the Act of 1864, giving effect to another recommendation of the Committee of 1862. Then in 1869, a Royal Commission was appointed to inquire into the condition of the Exchequer standards.

60. That was not to report specially in the advantage of this, or of that system, but rather to investigate the condition of the standards, and report upon their accuracy or otherwise, was it not?—That was the original object of the Standards Commission; but a Report was made by the Commission in 1869, and I believe it is admitted to be a very valuable Report, on the question of the introduction of the metric system of weights and measures into this country. That Commission made five Reports dealing with other parts of the subject, one Report dealing only with the metric system.

61. Have you that Report before you?—I have not the Report with me, but I am acquainted with it.

62. Are you acquainted with the result of that Report?—Yes.

63. What were the recommendations made in that Report which you have referred to on the metrical system?—The main recommendation was this: that the metric system should be recognised as an International system, and not as a National system; that its use should be permitted for International purposes of commerce and so on, but not for internal trade, and that troy weight should be abolished.

64. Then that Report on the metrical system did not agree altogether with the Report of the Committee of 1862 to which we have been referring, did it?—No.

65. Do those Reports of the Committee and Royal Commission constitute the whole of the information which has been obtained since the year 1862?—I submit that those Reports of 1862 and 1869 afford the best evidence that we, at present, have on the subject. Other reports have been made, but not by such important Committees.

66. Will you in the next place give the Committee information respecting the local and customary weights and measures in use in this country, which are not included in the above systems, namely, the Imperial or the metrical system. I presume you intend to inform the Committee of the weights and measures which are still legal, and which are in use. Are these measures, to which you are about to refer, legal or illegal?—They are not recognized by law. I wish to refer to this as illustrating the strong force of custom.

67. Will you then give the Committee information as to how far non-legal but customary weights and measures are employed still?—The Winchester bushel, abolished in 1835, by the Act of that year, is still occasionally used in



*Chairman*—continued.

connection with corn rents, as in Lincolnshire. The cran, a well-known measure for herrings in Scotland, was illegal until the year 1889. It had been made illegal until the Act of 1835, but its use was again permitted under the Herrings Fisheries Act of 1889.

68. It was found, I presume, that the cran was practically in use and that it was difficult, or impossible, to get the fishermen to employ any other, and therefore that the best way was to re-legalise it?—Yes.

69. Have you any other instances of a similar kind to mention?—Yes. The butchers' stone of 8 lbs.; butchers' meat is still commonly sold at the market in England by the stone of 8 lbs. and not by the legal stone of 14 lbs.

70. Do you mean to say that supposing a customer goes into a butcher's shop, and asks for a stone of beef that he gets 8 lbs. instead of 14 lbs?—In many districts in England I think he would get 8 lbs. only, but I cannot say whether it is the practice in the retail trade to buy by the stone; it is the practice in the wholesale trade to do so.

71. First of all, in the wholesale trade, is a stone of 8 lbs. commonly used?—Yes.

72. Although it is illegal?—Yes. Then the coomb of 4 bushels is used in the measurement of barley; it is an illegal denomination of measure as a coomb, but it is not illegal as a measure of 4 bushels. The coomb was an ancient measure used in the measurement of corn.

73. Does the value of the coomb vary in different places?—I think the value of the coomb has remained fairly constant. Then the carat, an ancient Arabic weight, is used for precious stones and diamonds; it is not legally recognised, yet it is used. Then the miners' dish is a local measure used in Derbyshire in determining wages. The amount of ore got up by the miner is placed into a standard dish known as the miners' dish. The boll of oatmeal is still recognised in Scotland; it contains 140 English pounds or 128 Scotch pounds. Then the ell has been illegal since 1835. Another local and customary measure is a gauge used in the measurement of sheet and hoop iron, known as the Staffordshire gauge.

74. Are those the only ones which you wish to bring before the attention of the Committee?—Yes.

75. I see in the evidence given before the Select Committee of 1862 by the late Dr. Leone Levi there is a long list of a number of articles showing that "wheat is sold by the bushel of 168lbs., 73lbs., 80lbs., 60lbs., 70lbs., and 63lbs., and so on. It is sold by the bushel of eight gallons at Saltash, and of 20 stone at Dundalk; it is sold by the load of five quarters, by the load of five bushels, by the load of three bushels, by the load of 488 quarts at Royston and Stowmarket; and of 144 quarts at Ulverston." Is that statement true of the present day, as it was 33 years ago?—It is true to one extent, that the weight of corn sufficient to fill an Im-

*Chairman*—continued.

perial bushel naturally varies in different parts of the kingdom, depending on the quality of the corn, but it is not true now in the way in which Professor Leone Levi put it then, because by the Corns Returns Act of 1882, generally, uniformity has been introduced. In the weekly returns of quantities by Inspectors of Corn Returns to the Agricultural Department, it is required that the Imperial bushel of wheat shall contain 60lbs.; of barley, 50lbs.; and oats, 39lbs.; and those uniform quantities are only recognised.

76. Not only according to Doctor Leone Levi was this the case with corn measures, but with other measures of wheat which he there specifies. Can you tell the Committee whether in these other instances (not to take up the time of the Committee by reading them all) the statements which he there makes, which I presume were true at that time, apply at the present day. Take, for example, the measures of length; he says, the Scotch mile is different from the English mile; the Irish mile is again different, and so forth; that the sub-divisions of the mile in Ireland are of one sort, and in England of another; that in sub-dividing a ton, a ton of stone is a different thing from a ton of other material. Are these matters facts at the present moment. For instance, he says, that a firkin of butter is 56 lbs., and a firkin of soap is 64 lbs.; a sack of flour is 20 stone; a sack of coal is 224 lbs.; a sack of grower's wool is 3½ cwt., and a sack of dealer's wool is 240 lbs. Do these anomalies exist at the present moment?—Not to any great extent. The Irish mile and Scotch mile are still locally recognised in some districts, but for all legal statutory purposes the mile of 1,760 yards is the only mile. With regard to firkins it is possible that there is still as much diversity as there was in 1862, because the firkin, as I understand it, is rather the name of the vessel in which the things are packed or carried, and naturally it will vary in different districts, like barrels do. With regard to the ton, I am unaware of any instance at the present time where any other legal ton than the ton of 2,240 lbs. is recognised. Even the long ton used in the coal trade is passing out of existence.

77. Is it true that a cwt. may contain 100 lbs., 112 lbs., or 120 lbs.?—No, the cwt. must contain either 112 lbs. or the cental of 100 lbs.

78. Professor Leone Levi states, that in those days a cwt. of pork at Belfast was 120 lbs., whilst at Cork it was 112 lbs.; what do you say as to that?—I am unaware that it is so.

79. In your opinion, then, have these various anomalies, during the last 30 years, considerably disappeared?—Yes.

80. That is your opinion, is it?—Yes, owing to the passing of the Weights and Measures Acts, 1878 and 1889.

81. Passing from that question, I should like to ask you what evidence you are prepared to place before the Committee with regard to the probable extent to which the different systems (the two you have spoken of, the Imperial on the one hand, and the metric on the other) are practically adopted?—Speaking from experience of the Standards Department, I beg to hand in a Return of Weights and Measures stamped by the different local Inspectors of Weights and Measures for the year 1893–94 throughout the United Kingdom, excepting Ireland.

*Chairman*—continued.

82. Does your office not take cognisance of the Irish weights and measures?—Yes, but the returns are not at present in such a form that I can present them, but I will do so before the Committee conclude their inquiry. As showing the extent to which weights and measures are used in retail trade, I may say that during 1893–94 3,518,278 weights were stamped.

83. That is to say, three and a half millions of separate weights were controlled, were they?—Yes.

Mr. *Stevenson.*

84. That is to say, they pass through the inspectors' hands?—Yes; and receive the verification mark. This does not include the number of those that were rejected because they were unfit and incorrect, but only those that were correct.

Mr. *Crombie.*

85. Have you any information as to the proportion which were rejected?—I have not any information with regard to that; but I will furnish the information later on.

*Chairman.*

86. In the retail trade those were the total number of available weights stamped during the year, were they?—Yes.

87. Can you tell the Committee the proportion of those which are Imperial and those which belong to the metrical system?—Of avoirdupois weights 3,390,063 were stamped; of troy bullion only 50,525; of apothecaries' weights 77,690.

88. Do the Committee understand that no gramme or kilogramme weights were stamped?—No, they may not be stamped.

89. You have explained that it is legal under certain conditions to use kilogrammes and metres. If it is between two contracting parties possible to use weights and measures of the metrical system, in what way do they obtain those weights if they are not used and stamped?—They cannot legally use metric weights in connection with a matter referring to trade; they must use equivalent weights. The equivalents of metric weights and measures are stated in the Weights and Measures Act of 1878 for that purpose, as the material use of metric weights is illegal.

90. Supposing a merchant in France orders a certain number of metres of cloth from a manufacturer in England, cannot that manufacturer employ a metre for measuring out that order in metres?—I think not, if for use in trade.

91. That is to say, that he is bound to measure it out in yards or in feet, and afterwards recalculate the number of yards or the number of feet which would make up the number of metres of the order?—Yes, for trade purposes.

92. He cannot employ, then, either metric weights or metrical measures?—It is almost a question as to what is the meaning of the term "trade."

*Chairman*—continued.

"trade." The Weights and Measures Act of 1878 provides that no metric weights and measures shall be used in trade. Those are not the exact words, but that is the effect of them.

93. Will you give the Committee the exact words of the Act?—I will read Section 24 of the Act of 1878: "Penalty on use or possession of unauthorised weight or measure: Every person who uses or has in his possession for use for trade a weight or measure which is not of the denomination of some Board of Trade standard, shall be liable to a fine not exceeding five pounds; or, in the case of a second offence, ten pounds, and the weight or measure shall be liable to be forfeited."

94. But I suppose that is in abeyance, is it not; it is not in use, is it?—Yes, there are convictions under that section every day. There are no Board of Trade metric standards for material use in trade.

95. It is clear then, is it, that the metric system is not one included in the Board of Trade standards?—Yes.

96. And for that reason the metre and the kilogramme are not legal standards in this country, if in use in trade?—Quite so.

Mr. *Stevenson.*

97. In manufacture, might not a man having a weaving shed, measure by metre in order to make sure that the cloth he is weaving for the French market shall be the metre in width?—I think it may be then so used, if used for the purposes of manufacture, and not for the purposes of trade.

*Chairman.*

98. But a man cannot measure out his goods by a metre measure, or weigh out his goods by a kilogramme weight to complete a French order, can he?—Not in trade.

99. Would that be any more illegal than using a coomb for measuring barley, which you have already stated is an illegal measure?—I should be glad not to express any strong opinion upon that.

100. As a matter of fact, the coomb and the carat are used, are they not?—Yes.

101. And there is no penalty for using them, is there?—No local authorities, so far as I know, have thought fit to direct their inspectors to take proceedings under the Act for the use of these.

102. But they are illegal, are they not?—Yes, so far as denomination.

103. With regard to the retail trade, have you anything more to say on that point, or will you pass on now to the question of the wholesale trade; you have given the Committee the history of the stamped weights for the retail trade, have you not?—Yes.

104. What do you say about the wholesale trade?—In the wholesale trade I can only speak according to the experience of the Standards' Department from such information as the local inspectors furnish us.

105. What does that amount to?—It does not amount, I submit, to much, because it is possible that the local inspectors, having to confine their

*Chairman*—continued.

observation to the prevention of fraud in retail trade as to Imperial weights and measures, might not have it largely directed to the use of metric weights and measures in the wholesale trade.

106. But, so far as it goes, will you tell the Committee what you have heard?—We find, from applications made to us, that the bulk of the wholesale trade is done by the Imperial system; but that there is a large use of metric weights and measures in the wholesale trade.

107. Can you tell the Committee in what departments of the wholesale trade that is especially the case?—In chemical works and by shipping firms. By photographers, wholesale chemists and druggists, and railway carriage companies.

108. You mean the builders of railway carriages, I presume?—Yes; in wholesale and manufacturing houses, exporting to continental stations, as the straw-plait trades; silk manufacturers, in the cotton export trade, and in steel works. Those are the principal users of the metric system in the wholesale trade.

109. Can you give the Committee any information as to the relative amount of the use of metric measures, compared with the use of the Imperial standards; can you tell the Committee whether it is one-twentieth, or one-hundredth, or one-thousandth of the total?—I cannot.

110. Can you give the Committee any estimate of it?—No, it is so difficult to do so. The local inspectors, if they had the right of entering into all the premises, might probably furnish us with the information; but they have no right to enter the premises of manufacturers who are only manufacturers.

Mr. *Godson.*

111. It is a very small proportion, is it not?—I really could not express an opinion.

112. Except for houses exporting to countries using the metric system, I mean?—I can only conceive that the retail trade, as compared with the wholesale trade, must multiply itself in almost an unknown ratio.

*Chairman.*

113. Have you any information to give the Committee with regard, for manufacturing purposes, of the use of the metric system?—For manufacturing purposes there is a larger use of the metric system than there is in the wholesale trade.

114. Is that so with regard to engineering works?—Yes, particularly in the use of weighing instruments, graduated to show metric quantities.

115. On this subject you do not attempt to give, I suppose, specific information; you are not an expert on those matters, are you?—No.

116. And all your knowledge is derived from the information you obtain from the inspectors under your control?—Yes, some of whom will probably appear before the Committee.

117. Probably from a manufacturer or a person engaged in the trade the Committee may

*Chairman*—continued.

be able to obtain more satisfactory information on that point?—Yes.

118. With regard to scientific use and chemical research, have you any remark to make on that point?—The Standards Department have verified, and continue to verify, numbers of standards for the use of chemists and others, as well as for use in scientific research, verifying measures of capacity, gramme weights, and millimetre measures of length.

119. Is that done for a special fee?—Yes, it is done for a fee approved by the Board of Trade under the Act of 1889.

120. And it is largely made use of by scientific men, is it, for the controlling of their weights?—Yes.

Mr. *Stevenson.*

121. Can the local inspectors do that?—Some of them are able, so far as skill goes, to do it, but, as a rule, the fee being small, scientific men prefer to come to the Standards Department.

*Chairman.*

122. Besides, the Standards Department has got all the balances and accurate measures at hand of the best kind, whereas the inspectors probably would not have the apparatus necessary for the purpose?—Quite so, in some cases.

123. You will undertake, of course, to verify weights, whether they be Imperial or whether they belong to the metrical system, either one or the other, will you not?—Certainly, we verify as many metric weights for scientific purposes as we do Imperial weights.

124. In a similar way as at Greenwich they verify chronometers and thermometers, and at Kew they verify barometers?—Yes.

125. What have you to say as to who are the great users of weights and measures; is it the manufacturer who sells and the merchant who buys by a written order, or the shopkeeper who sells over the counter?—I regret I can offer the Committee very little evidence on that point. It involves questions as to what is the proportion of retail traders to wholesale traders. Our information goes to show that the more important user is the retail seller and the retail buyer, that the use by others is nothing so large as that of the retail buyer and seller.

126. With reference to the effect of previous changes in our system of weights and measures, and the changes which have been effected in other countries, what can you tell the Committee?—First, as to the changes in our own country, when avoirdupois weight was substituted for troy weight very little difficulty appears to have been felt, as far as I can judge from official papers, in making that change.

127. That change was made when?—It had been gradually coming on since the year 1841, and certainly was completed in 1855. It was not urged, there was no compulsory legislation, but the thing took effect through the legal standards.

128. But if there was no compulsion, do you mean to tell the Committee now that troy weight is not illegal?—I beg pardon. Compulsion to the extent that an avoirdupois pound was made the only legal pound, but there was no legislation imposing a penalty for using

*Chairman*—continued.

the troy pound, and it did not become an offence to use the troy pound until the year 1878, when it was absolutely made an illegal pound, of which there was no Board of Trade denomination.

129. Then between 1842 and 1878, as I understand it, the troy pound was a legal pound, but gradually, owing to the fact that the avoirdupois pound came more into use, the troy gradually disappeared; is that the fact?—Yes.

130. How was it that the avoirdupois pound gained the upper hand, and why did the troy pound disappear?—The avoirdupois pound appears to have been the ancient standard of the country, the Saxon standard, and although for coinage purposes it was not recognised, troy weight being the weight recognised for coinage purposes, yet the bulk of the common trade of the country in ancient times was carried on by avoirdupois weight. That system of having a legal standard and a practically commercial standard remained until the year 1824, when the avoirdupois pound was legally recognised, and in 1855 the troy pound was no longer recognised. I am unable otherwise to offer a reason why avoirdupois weight, or the heavier weight as it was known in ancient times, has been adopted instead of troy weight.

Sir *Samuel Montagu.*

131. The ounces are different, are they not?—Yes, as the proportion of 480 to 437·5 grains.

*Chairman.*

132. Troy weight is used now, is it not?—Yes, but its use is limited to the weighing of bullion and precious stones.

133. With regard to the cental and the cwt., what have you to tell the Committee, the cental being of course 100 lbs., and the cwt. of course being 112 lbs.?—The cental was introduced in 1879, and possibly there has not been sufficient time to ascertain to what extent it might or might not ultimately displace the cwt. of 112 lbs.; but so far as we are informed the use of the cental is confined to the weighing of corn in the Liverpool market.

134. It is a legal weight for all purposes, is it?—It is.

135. But it has not yet found its way into general use, has it?—Not yet.

136. With regard to the Winchester bushel, as against the Imperial measure, what have you to say?—A long time elapsed before the change was effected. Although the Winchester measure was declared to be illegal, and it was an offence to use a Winchester bushel after the year 1824, yet it was extensively used until the passing of the Weights and Measures Act, 1835, when the penalty was increased on the use of any local or customary measure, including the Winchester bushel.

137. Can you tell the Committee what was the foundation of the Winchester system of weights and measures?—I understand the Winchester bushel was so called because the first standard of that name was made in the reign of King Edgar, and deposited at Winchester.

138. And

*Chairman*—continued.

138. And it has remained the Winchester bushel ever since, has it not?—Yes.

139. And as to the Winchester quart which we find in chemists' bottles now, what fraction of the Winchester gallon is that?—One-half.

140. The Winchester quart is almost twice the capacity, is it not, of the ordinary imperial quart; at any rate it is of much larger volume, is it not?—The Winchester gallon or four quarts contained 231½ cubic inches as compared with the imperial gallon of 277¼ cubic inches. That led to the difficulty which was felt in making the change from Winchester to Imperial measure, the greatest change that has ever been made in this country in our measures of capacity. Then the whole of the measures of the country had to be changed after the passing of the Act of 1835; that meant not only that all the bushels in use for retail trade or otherwise, but the half bushel, the peck, the gallon, the quart, the pint and the half-pint, all had to be changed, and imperial measures substituted for them.

141. How long was it before that change became general, or the adoption of the imperial system became general or universal?—Practically not until the year 1841.

142. Then it took five years, did it, to change the measures all over the country?—Yes.

143. Was there very great opposition at the the time, do you know, to this change?—It does not appear from the reports that there was any active opposition; but the force of custom was so strong that people would not take the trouble to carry out the Act, and the local inspection was not active.

144. Can you refer the Committee to any printed statement with respect to this change, and the difficulties, or otherwise, that accompanied that change?—There is a Report of the Select Committee on the Weights and Measures Bill of 1835, which refers to the difficulties and probable effects of the change.

145. But would not there be a later Report which would tell the Committee of the difficulties, inasmuch as the change did not become universal until five years afterwards?—I would suggest that the Report of the Commissioners in 1841 might contain a reference to it. The Report was laid before Parliament.

146. With regard to the question of the variation, or of the passage from the ell to the yard in the measuring of length, what have you to say?—The ell remained for some time like the standard yard, a standard measure for this country.

147. Until what year?—Until the year 1824. It was practically made illegal in 1601, when a new standard yard was constructed under the direction of a Commission appointed by Queen Elizabeth; but still it remained in use, particularly in the measurement of cloth, until the year 1824.

148. And after that date was it rendered illegal?—It was occasionally used in the measurement of cloth until the year 1835, when the stringent Act of that year put an end to all local and customary measures, including the ell. I may mention that the English ell, as distinguished from the Scotch elwand of 37½ inches,



*Chairman*—continued.

was equal to 45 inches; and although it is commonly taught in schools as being a measure in use, it is not actually in use.

149. It is not in use at all now, is it?—No.

150. With regard to the foot, you have told us that the yard is the standard of length. I understand that there is no standard foot, and that the dimensions of a foot is one-third part of a yard; is that the case?—The foot is a measure derived from the yard.

151. There is no standard foot, is there?—There is a Board of Trade standard foot, but no fundamental standard of a foot.

152. In order to get the foot you must divide the yard into three equal parts?—Yes, in the same way as the foot would be divided by twelve to get an inch.

153. Have you anything to say with regard to the change from the French *toise* to the metre?—I have already offered some observations bearing upon that with reference to the metric system, showing that from the time of the French decree of 1790 the French *toise* remained in use practically until 1840.

154. It was, in fact, not until nearly half a century after the metrical system had been promulgated that it became universally established in France itself?—That is so.

155. With regard to the kilogramme and the German pfund?—From the information at the Standards Department I find that in Germany the metric system was introduced by a law of the 13th June 1868, and that in that law the old German nomenclature, as well as the new French metric names, are used. For instance, one may use and speak of the pfund in Germany as well as of the demi-kilogramme, of the schoppen, zoll, &c.; and it only took practically four years to introduce the metric system into Germany, although at the present moment the old German names are used in some districts.

156. Are you prepared, from your own knowledge, to give the Committee any information with regard to the adoption of the metrical system in Germany?—I cannot, except from my knowledge of what took place at the Conference at Paris.

157. That was a Conference simply with regard to the standards, and not with regard to the adoption of a system, was it not?—Quite so. May I mention also that in Austria the metric system was introduced in 1871, made permissive in 1873, made the only exclusive system in 1876, and that the metric nomenclature was adopted.

158. Then in Austria, as in Germany, the metric system is now the law of the land, is it?—Yes, it is.

159. To the exclusion of the old Austrian measures?—Yes, mainly so.

160. Do you know whether there they transferred the old names to the new units, or whether they adopted the French names?—Our information is that the metric names are commonly used in Austria, more so than in Germany, perhaps, but the old Austrian measure, the klafter, is used still.

161. What country in Europe now does not use the metric system?—I would beg leave to hand in a Return showing the systems of the

*Chairman*—continued.

various countries, particularly of the British Empire, which would give indirectly the names of the countries which do not use the metric system; but I may mention that, practically, in Great Britain and Russia, the metric weights and measures are not permitted to be used except, as I have already explained, in the written use of weights and measures. In Turkey and Servia, although the law requires the use of metric weights and measures, they are not generally adopted; in Greece it is so too. The old Turkish weights and measures are used in Greece. In Germany, Austria, France, Italy, Portugal, and in Spain the metric weights and measures are the only legal weights and measures.

162. Then, in fact, the only two countries of any importance in Europe in which the metric system is not illegal, are the British Islands and Russia?—So far as my information goes, that is so.

163. With regard specially to the other portions of the British Empire, can you give the Committee a statement as to what weights and measures are legal in the Colonies, in India, and in certain other dependencies?—In this Return, which I beg to hand in, it appears that the imperial system of weights and measures is legally enforced for trade throughout the British Empire; that is to say, in Europe it is in force, besides Great Britain and Ireland, in Gibraltar, and the Maltese Islands; in Asia it is in use, in Cyprus, Aden, India, partly Ceylon, Straits Settlements, Hong Kong, and Borneo. In Africa it is in force in all our possessions. The imperial standards are also recognised, to some extent, in the United States; it is legally in force in the Dominion of Canada, Newfoundland, Bermuda, the West India Islands, British Honduras, British Guiana, and Falkland Islands. It is the only system in force throughout Australia, and also in Tasmania and New Zealand.

164. Will you give the Committee the position of the matter with regard to the United States?—In the United States, by an Act of Congress, approved in July 1866, the use of the weights and measures of the metric system is made permissible either as to written contracts, or in retail trade, as distinct from its use in Great Britain. All contracts are declared not to be illegal, because the weights and measures expressed or referred to therein are weights and measures of the metric system. By a joint resolution of Congress of July 1866, the Secretary of the Treasury was authorised and directed to furnish each State with one set of standard weights and measures of the metric system; tables of the equivalent of metric weights and measures in terms of those of the United States are given in the Acts of Congress of 1866. I am unable to find that the Secretary of the Treasury has, however, furnished any such standards to the different States.

165. You cannot tell the Committee that, can you?—I am unable to find that he has done so.

166. Do you mean that you have asked for information, and cannot get it, or that they do not tell you?—I am unable to find the information in the official papers forwarded to the Standards Department from Washington.

*Chairman*—continued.

167. Before 1869, was there any distinct system of weights and measures adopted in the various States, or had each State its own system?—Each State had, as it has now, its own system of local administration as to weights and measures, provided those weights and measures were based on the standard yard, the standard troy pound, and the Winchester gallon, those being the three old units of the United States.

168. Then they took over the old units from England which existed at the time, and have stuck to them, have they?—Yes.

169. Have they not altered them, as we have done, to anything similar to our Imperial system?—There is one important alteration in the United States during the past year. The Government have declared that for geodetic purposes all measurements should be referred to the yard and to the pound, as well as to the metre and kilogramme, but that the standard yard and pound shall not be determined by reference to any material copies kept at Washington, but to the metre and kilogramme kept at Paris, making the length of the fundamental standards of the United States dependent on the metric standards at Paris.

170. That is a very important decision, is it not?—Yes, it is.

171. At what date was this done? The matter is referred to in the last Annual Report of the Board of Trade, dated 2nd August 1894.

172. Have you any other point to mention in regard to the systems adopted in various countries. Can you put in a list of the other countries and their systems which we have not mentioned; for instance, Mexico and the South American Republics; can you put in such a list, so far as you are able, of the other countries which have not been mentioned?—So far as we are able to say at the Standard Departments, that is to say, so far as we furnish standards to different countries, I can put in a Return showing where the Imperial system of weights and measures is legally in force; where the metric system is legally in force; where systems other than the metric and Imperial systems are in force; where both Imperial and metric systems are optional; and where the metric system is permissible for certain purposes only.

173. The last point upon which you desire to give evidence, is it not, is respecting the origin of the International Metric Bureau, and the adhesion of Great Britain to the Metric Convention of 1875. Can you give the Committee a short statement of the origin of this International Metric Bureau?—The International Committee of Weights and Measures at Paris, which has its Metric Bureau at Sèvres, was established in consequence of the Metric Convention of May 1875, and that Convention was signed by certain high contracting States, exclusive of great Britain.

174. You mean that Great Britain did not give its adhesion?—No; but Great Britain finally joined the Convention in September 1884. The Convention has now the adhesion of 23 high contracting

*Chairman*—continued.

contracting States; practically, every civilised country has joined it.

175. Will you state to the Committee, in as few words as you can, the object which this International Metric Bureau has for its existence?—To construct and maintain international metric standards, to verify, from time to time, copies of those standards for the use of the different States who have joined the convention, and to verify primary metric standards for highly scientific purposes.

176. The Bureau, I understand, does not take any steps to induce countries to adopt one system or another, but it has simply for its object the establishment of correct standards when required?—That is so. The Committee is a scientific body, and it has, as I may say, no propaganda.

177. What delivery has the Board of Trade recently made of new international metric standards?—The three national standards of *mètre-à-trait*, *mètre-à-bouts*, and the kilogramme.

178. Will you explain the definitions you have used with regard to the *mètre-à-trait* and *mètre-à-bouts*?—The difference between an end measure, *à-bouts*, and a line measure, a measure *à-trait*, is that in the former measure the distance of the metre is determined by the distance between the two ends of a metal bar; in the latter standard, the measure *à-trait*, the distance is determined by the length between two transverse lines engraved on a bar.

179. Which of these has been adopted by the International Metric Bureau as being the most suitable and best?—The line measure, and not the end measure. Great Britain has been the first country to have all three standards delivered to her.

180. The three standards being what?—The end-metre, the line-metre, and the kilogramme.

181. Then I understand that there are always two measures of length, the end measure and the measure between two points, and the third standard is the kilogramme?—Yes; in the international expression it is the measure of extension, known as the metre; and the mass, known as the kilogramme, determined by the kilogramme weight.

182. Are these now in the possession of your Department?—They are in the custody of the Board of Trade.

183. But they are not legal standards, are they?—They are legal, for the purposes of science and manufacture.

184. Of course each nation makes a certain contribution to the expenses of carrying on the object of the Bureau of Verification and Standards, and so on; what does England contribute?—As appears from the officially printed papers, England pays at the present time 195*l.* towards the Bureau; other countries pay more or less according to their interest in the Bureau. We paid on entrance a certain sum of money, and we have also contributed towards certain arrears of defaulting States.

185. And have we obtained these three standards for the money we have paid?—Yes.

186. That, I think, concludes the statement which you wish to make on that head?—Yes.

*Chairman*—continued.

187. Have you any other matter which you wish to bring before the Committee?—No.

Sir *Samuel Montagu.*

188. The pound troy, you say, has ceased to exist as a legal weight; does the pennyweight troy exist, or has that been abolished?—The pennyweight is still largely used in trade.

189. Is it legally recognised?—I am unable to say whether it is a legal weight.

190. The troy pound has been abolished and the troy ounce is now the unit; is that so?—That is so.

191. And the ounce has been decimalised for bullion purposes; is not that so?—Yes, in the year 1855.

192. Have you heard of any difficulty arising from that change?—None.

193. The gold and silver at the Mint are, as you know, bought according to troy weight. The alloy, the copper, I suppose is bought according to avoirdupois weight?—That is so.

194. And mixed together with the gold or silver the result is dealt with by troy weight, is it not, that is to say, the silver or gold mixed with the copper is weighed and certified according to troy weight?—Bullion is weighed and certified by troy weight only.

195. Is it the fact that electric units are legal?—Electric units for the measurement of electrical resistance current, and pressure, are legal.

196. Are they based on the metrical system?—They are based on the metrical system, and on the centigrade scale.

197. You spoke of the stone of meat being eight pounds; is that the stone which is quoted in the market prices always?—It is an offence for a paper to quote a denomination of weight which is illegal, and I should think that the quotation there would be the Imperial stone.

198. Is it not the fact that all the quotations for meat which appear in the papers are for a stone of eight pounds?—I have noticed in some quotations that the quotation is "per eight pounds," so as to avoid the offence of quoting "per stone."

199. You mentioned a Scotch pound in the course of your evidence; does that differ from an English pound?—One Scotch Troyes pound or Lanark pound equalled 7608·95 English grains, and has been out of use since the Act of 1824.

200. What was the difference between the Scotch pound and the avoirdupois pound?—Nearly in the proportion of 7,609 to 7,000 grains.

201. Was there any difficulty arising from the change?—There appears to have been great difficulty in passing from the Scotch weights and measures to the English, as may be seen from the Report of Lord Ebrington's Committee in 1834. The Act of Union, 1706, provided that English standards only should be used.

202. Is there a special stone for glass?—It is unknown to me at present, but there was a stone of five pounds.

203. Is it a fact that at the present time the tons at different coal mines vary in hundredweights?—I think not.

Sir *Samuel Montagu*—continued.

204. Can you tell the Committee what the difference is between the practical metre and the theoretical metre, that is the ten-millionth part of a meridian; you told us that the actual metre in France differed somewhat?—The present calculated length of the ideal metre is 39·378 inches as compared with 39·371 inches for the metre *de facto*.

205. That is to say the length which obtained when the metre was founded and the more exact measurement which has been made since?—Yes.

206. As to the verification of weights and measures, is that conducted only in London, or is it also conducted in the provinces?—The verification of all standards is conducted only under the Board of Trade at 7, Old Palace Yard, Westminster; but we also verify local standards in Scotland, that is, the standards used by the local authorities, who appoint the inspectors. We verify those either in Edinburgh or Glasgow, and in Ireland we have an office at Dublin for the purpose. It is only a matter of practical convenience having those offices, in order to save trouble in sending to London. For all other purposes the verifications are carried on in London only.

207. Would the weight verified in Dublin be a legal weight to be used in London?—Yes, as a standard.

Mr. *Webster*.

208. You mentioned that there had been a change from the troy to the avoirdupois weight in this country. Were there any great difficulties found by the people in that change, or was it an easy change?—It was a comparatively easy change.

209. Can you inform me what year they changed into the metrical system in France; about the time of the Revolution, was it not?—The first decree was dated 1790, and the first law was 1793, and the standard was finally introduced in 1794.

210. Have you read or heard whether there was any great difficulty found in France at the time of the change from the old system to the new metrical system?—I conclude that there was very great difficulty.

211. You conclude there was very great difficulty, but have you any knowledge on the subject?—I draw my conclusion from the fact that there were several different Acts of Parliament introduced by the French Legislature, first making the metric system absolutely compulsory, in 1794, then, in 1801, permitting the use of the old weights and measures and the metric weights and measures concurrently, and finally, in 1840, absolutely forbidding the use of any other but the metric system.

212. You have told the Committee that at a very recent period the metrical system was introduced into Austria; how long was it before the new system was found to work easily, and the old system of weights and measures practically became obsolete?—Only a few years.

213. How many years would you call a few years; two or three years?—It came into force in 1872, was permissive in 1873, was made exclusive in 1876, and our information is now that no other weights and measures but the metric system are in force in Austria, except as to measures of length.

Mr. *Webster*—continued.

214. That is more recent than the French, is it not?—Yes; I think very much of that is owing to this fact, that the Austro-Hungarian Government appointed a strong adjusting Commission to introduce these changes, which Commission was armed at all points; it had officers all over the country, and so the system was made uniform.

215. Can the Committee get the Report of that Commission?—I will submit references to some published papers on the point.

216. Can you give the Committee any information about the change in Italy. When was the change effected in Italy?—I can offer the Committee no information on that point, except that I can say it was introduced after 1869. The metric system is general; but we have no information.

*Chairman*.

217. Have you ever endeavoured to get any information from the Italian Government about it?—No.

218. It would not be difficult to do so, would it?—No. There has been no time since the appointment of this Committee to get the information.

219. Could you undertake to get the Committee that information in the course of time, or had they better get it for themselves?—I will endeavour to do so.

Mr. *Webster*.

220. I think you said the metrical system was partly used in India?—Yes, the metric system was established, or sought to be established in British India by an Act of 1870, and an Act of 1871. The Act of 1870 was vetoed by the Secretary of State. The Act of 1871, which superseded the Act vetoed by the Secretary of State, provided for the establishment of new weights and measures of capacity (not measures of length) based on the native names and standards, to be distributed to different States. No steps whatever, so far as we are informed, appear to have been taken for the purpose of giving effect to the Act of 1871. In 1889 the Measures of Length Act, 1889, received the assent of the Governor General, by which the yard measure was adopted as the standard of length. It would appear that the use of the metric system is permissive in India.

Mr. *Wrightson*.

221. With regard to the measures of area, is there much variety in the measures of area throughout Great Britain?—No. There is no variety till one crosses the border, and then, in the North of Scotland, we find the Scotch acre used. The Irish acre is also in use, but not to any great extent; that is to say, it is not in use for any purposes of contracts.

222. To what extent does the Scotch acre differ from the English acre?—One hundred Scotch acres make nearly 127 English acres. The

Mr. *Wrightson*—continued.

The Scotch acre equals 6150$\frac{4}{10}$ths square yards.

223. Is the grain of avoirdupois the same as the grain of troy?—The same.

Sir *Edward Hill.*

224. You told the Committee that the metre system was largely used in wholesale works, in chemicals, and in shipping; do you mean to say that the metre itself is used, or that the English yard with decimal parts is used?—I mean that the actual metric weights and measures are used.

225. How are they used by shipping firms?—I am informed that the metric system is used in the West Riding of Yorkshire in weighing coal into bags for export to France. In Glasgow, Leith, and Swansea, shippers are stated to use metric weights and weighing instruments in packing goods for export.

226. The calculations for measurement by shipping firms, as you are aware, are done by means of decimals, but I am not aware that they are done by metres?—I suspect they have reference to the forwarding of goods.

227. I suppose the reason that it is so largely used in the wholesale trade, and these various trades you have mentioned, is that those engaged in them find it to their pecuniary advantage to use this particular mode of measurement?—I should think so.

228. And probably because other nations do the same?—I am not prepared to say that is so.

229. You have, of course, given a life study to the question of measurements and weights; may I ask whether, in your opinion, the metric system is one of which you thoroughly approve?—If you will allow me to say so, my study has been one naturally of an official kind. I could not offer an official opinion on the point; and my own personal opinion would be worth very little.

Mr. *Stewart Wallace.*

230. May I ask you why you do not think it desirable to go behind the Report of the Committee of 1862; why do you not go further back?—Because since that period the conditions have changed. That Report summed up in an excellent manner, speaking only in a technical sense, all the information which had been prepared by previous Reports.

231. You have given the Committee certain evidence with regard to the various stones, the 8 lbs. of meat, and the glass stone, and the coomb of corn; if a contract were founded upon these bases in writing, could it not be enforced in a Court of Law?—In saying they were illegal standards I could not go so far as to say a contract could not be enforced upon them, but I meant to say that there were no Board of Trade standards of them, and therefore they were of illegal denominations.

Mr. *Stewart Wallace*—continued.

232. But not in the sense that they could not be enforced as contracts?—That is a matter of construction.

233. Is the Irish mile largely in use in Ireland?—Not largely in use, but it is in use.

234. And the Irish acre?—The Irish acre is also in use.

235. But is it not the fact that, if it is not expressly stated to be an Irish acre, the statute acre prevails?—Yes.

236. Is it not the same regarding the mileage?—Not to the same extent as the acre.

237. You said you would get the Committee the number of incorrect weights compared with those stamped as correct; what is done with the light weights?—The Inspector of Weights and Measures either returns them to the owner to be re-adjusted or repaired, or else, in districts where he is so authorised by the Board of Trade, he himself repairs the weights, or puts them right, and then stamps them.

238. What evidence have we that the avoirdupois was the ancient weight; on what do you base that opinion?—We have no material standard of the avoirdupois pound earlier than the one in Henry VII.'s time, so that evidence before that period has to be based very much on the writings of metrologists,

239. Do you know what prompted the United States to take the action they did in abandoning their own standard, and reverting to the standard of Paris?—I think the United States Coast and Geodetic Survey, which takes charge of matters relating to weights and measures, found that for surveying purposes the metre was more convenient, and adopted the metre as the unit. Then the standard yard became a secondary unit.

240. Has any inconvenience been found in practice from having adopted that plan, so far as you know?—No, but I am not prepared to say that some may not be found. If ever a question should arise as to the application of such a plan, I think inconvenience might arise.

241. Have you any papers, official or otherwise, which would show exactly the action the Government took in so legislating, or so reverting to the metre?—The only information we have as to that matter was printed in the Annual Report laid before Parliament last August, a copy of which I will hand to the Committee.

*Tuesday, 5th March* 1895.

MEMBERS PRESENT:

Mr. Burt.
Mr. Crombie.
Mr. Alban Gibbs.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Stewart Wallace.
Mr. Webster.
Mr. Wrightson.

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. H. J. CHANEY, re-called; and further Examined.

Mr. *Stevenson.*

242. You spoke of the recommendations of the Select Committee of 1862 with regard to the metric system, did you not?—Yes.

243. And I think you said that the Committee recommended that the system should be rendered legal but not compulsory, until it was sanctioned by the general conviction of the public?—I spoke of that as being the recommendation of the Committee.

244. With regard to the anomalies which still remain in the markets of the country, which I think you have called "custom" as distinguished from "law," such as the stone in regard to butchers' meat, I presume that only applies to wholesale transactions; nobody buys a leg of mutton by the stone, I presume, but by the pound?—It applies only to dealings between the meat salesman and the butcher, not to the retail purchaser.

245. So that, in fact, there is really no anomaly existing in the retail trade, is there?—No.

246. You mentioned the Scotch and Irish miles, are they not both practically obsolete?—I cannot say that they are.

247. When did you see them last quoted in any record of dimensions or in any other way?—I am unable to give the Committee the exact date; I can only say quite generally, within the last year or two.

248. The milestones on the roads are marked according to the Imperial miles, are they not?—That is the statutory mile.

249. Was the Scotch mile a definite number of yards?—Yes; but originally it contained 1,920 Scotch ells, or 1,976·523 yards.

250. And was the same yard used in Scotland as in England?—Yes.

251. Does that remark apply to Ireland also?—Yes, since the year 1495.

252. So that, however the miles varied, they were made up of the same unit of a yard?—Yes, in later times.

253. You mentioned that three and a-half millions of weights in the retail trades were stamped every year; have you any idea as to the proportion in actual use which do not come up for stamping?—I can offer the Committee only a general estimate as to that proportion. It is the practice in most districts for all the weights to come up for re-stamping every year. In some districts, however, the weights do not come up so often, they are brought up whenever the trader finds it convenient to bring them, probably once in two years. That being so, I think we might multiply those figures by one and a-half, which would give us approximately, perhaps, the total number of weights in use for trade.

Mr. *Stevenson*—continued.

254. I think you said that no metric weights were stamped by the Board of Trade. Do you consider yourself not at liberty to stamp them, or are they simply not brought to you for stamping and verification?—I beg your pardon, the Board of Trade have stamped metric weights. If I have suggested that they have not done so, it was a mistake.

255. You stated so in answer to Question 88?—I understood the question of the Chairman to refer to the gramme and kilogramme weights in use in trade, that is, those weights which are required to be stamped by the inspector. The previous Questions, 86 and 87, refer to the stamping of weights for use in trade.

256. Then the only weight in use in trade under the metric system is the kilogramme or its sub-divisions?—The kilogramme and the parts and multiples of the kilogramme.

257. Assuming that it is legitimate for a manufacturer to use in his manufactory metric standards in order to adjust his dimensions, if he wishes those standards checked, he may do it himself, may he?—No; if a manufacturer wishes to have his metric weights verified, he can have them verified by the Board of Trade on payment of a small fee. As a matter of fact, many manufacturers do get their metric weights so verified.

*Chairman.*

258. The difference, I believe, is that in one case you say you cannot stamp metric weights or measures for use in trade, whereas, in the other case, if metric weights or measures are sent to you, you will undertake to compare them for a given fee for scientific researches, or for other purposes, but not for trade; is that so?—That is so; the Board of Trade are authorised to verify metric weights for the purposes of science and manufacture, but not for the purposes of trade.

259. You

Mr. *Stevenson.*

259. You answered Question 108 in these words: "In wholesale and manufacturing houses, exporting to continental stations; largely for the straw plait trades; silk manufacturers; in the cotton export trade; and in steel works." Those are the principal users of the metric system in the wholesale trade. Have you any figures to show how many manufacturers there are of those classes?—No; I have no statistics to offer as to the number of wholesale dealers or others who may use metric weights.

260. You were asked how old our present standards were, but I think your answer referred mainly, not to the weights themselves, but to ascertainment of them with scientific accuracy. In point of fact, how old are the avoirdupois weights in use in this country, or rather, how old are the specimens you have in your standard department?—The present imperial standard pound weight itself dates only from the year 1855; but multiples of the pound that are known as Board of Trade standards, date from the year 1824. Previously to 1824 there were in use standards of the time of Henry VII., and the first legal use of avoirdupois weight was in the year 1495.

261. I want to go back to the period of the actual use. How old is that in the country?—I think it dates back to the Saxon period. It is beyond historical memory, but it is generally considered that the avoirdupois weight was the older weight of the country, and existed in this country before troy weight.

262. Was there an avoirdupois ounce as far back as you can tell as well as an avoirdupois pound?—No, there was not.

263. When did the ounce first come into use?—It is difficult to say. Authorities differ, but the earliest record we have of the avoirdupois pound was a pound divided into 15 ounces. One may go back, as far as the ounce, as one-sixteenth of the pound, to the 13th century.

264. You mentioned the English ell of 45 inches as being an obsolete standard. Have inches always been exactly the same in England?—The English foot, like its origin the Roman foot, has always been divided into 12 parts, the inches.

265. You mentioned at Question 153 that the French toise remained in use practically until 1840. What is the nearest equivalent in our standard to the French toise?—In feet, the Toise de Peru, which was the standard of the toise, was equal to 6·3945.

266. May not measures which have practically become illegal still remain in actual use among the people?—Only to a limited extent. Local authorities have power, if they think fit, to interfere with the use of any illegal weights, and it rests with the local authorities who appoint the inspectors, to decide whether they will interfere with any existing illegal denomination of weight or measure.

267. I am speaking generally, rather than of this country. Let me hand you a metre rule, which I bought in Paris in 1872. I think you will see where the length is a metre, it is divided on the other side into 36, which I presume we may call inches?—That is so. It is divided on the one side into the metre, decimetre, and centimetre, and on the other side into inches and half-inches, and twelfths.

Mr. *Stevenson*—continued.

268. Here is another rule, which I bought in Cannes in 1882, which is graduated in precisely the same way, is it not?—Yes, that is so.

269. Does it not strike you that a number of people in France would still be thinking and speaking of the old inches when there is a demand in the shops for that kind of rule?—From my own personal experience in France I have found no great use of the old denominations; and generally the metric denominations seem to be those in use. As to what extent people may calculate or think in the old denominations, I could not say, but there is no evidence of it in the transactions in trade.

270. You said, in answer to Question 155, that in Germany practically the metric system had been adopted for four years. May I put into your hand a metre rule which I bought in Germany in 1871, which, I think, you will observe also is divided into 36 divisions of inches, and each inch into 12?—Yes; that is to say, divided into 36 parts on the one side, and into 100 parts on the other.

271. Then I have here a later rule, which I bought in Bonn in 1885, which is adjusted to the metre on one side and to Rhineland feet on the other side, and there, in like manner, is the metre divided into 36 divisions, and each of those into 12?—This is divided on one side into 100 parts, evidently millimetres throughout.

272. Then you see the Rhineland stamp on the other side?—On the other side it is stamped "Rhineland," with apparently 36 inches marked on it.

273. Making up about two inches short of the metre?—Yes.

274. With regard to the United States, I think you told us they took across the Atlantic with them our old weights and measures with our English tongue?—Yes.

275. Have they at all departed from our fundamental units in the United States?—They are not the existing fundamental units, because the yard measure, the troy pound, and the Winchester gallon, represent the present units in the States, whereas in England it is the yard measure, the avoirdupois pound, and the Imperial gallon.

276. Is not the troy pound just as obsolete in the United States as it is in this country?—I am afraid I could not offer the Committee an opinion upon that.

277. You are not aware, are you, that all the statistics of trade in the United States are rendered in our pounds?—I cannot tell.

278. And you are not aware that practically they have discarded the cwt., the quarter, and the stone, and the only denomination of statistics in trade, as far as I can find, in the United States, is the pound?—I could not offer any opinion upon that.

279. In the first Report, signed by Sir Thomas Farrer, now Lord Farrer, in 1878, after the passing of the Weights and Measures Act of that year, it is said on page 4, referring to the table of equivalents of metric notation of imperial weights and measures, "Metric weights and measures intended to be used for the purposes of science or manufacture may be verified by the Board of Trade." I think you said there was a difficulty in carrying out what seemed to be the intention of the Board of Trade in 1878, did

Mr. *Stevenson*—continued.

you not?—There has been no difficulty in the verifications by the Board of Trade of metric weights and measures for the purposes of science and manufacture.

280. I thought, from what you said, there was a practical difficulty in the manufacturer actually using metric weights and measures in his manufacturing business?—Some difficulty will arise if the manufacturer is also a trader; it would depend largely on the extent to which he separates his business. On the one hand, a manufacturer may use metric weights and measures for the purpose of manufacture, and on the other hand, he is liable to the consequences of the Act if he uses those metric weights and measures for the purposes of trade.

281. Suppose he uses them only for manufacture and not for trade, would he be liable to any penalty?—I am afraid I ought not to offer any opinion upon that; it is a matter of legal construction. Speaking quite without authority, I should say if a manufacturer had his weights verified in the Standards Department, he could legally use them without any intervention by the local inspector.

Sir *Samuel Montagu.*

282. I want to ask you what grounds you have for supposing that there are no more customary weights and measures in use than those you told us of the other day?—I ventured to refer, in answer to Questions 66 and 67, to certain denominations of local and of customary weights and measures in use, but I did not wish to convey to the Committee the impression that that was a complete list of all local and customary weights and measures in use in the country.

283. I have heard to-day that potatoes are sold in Scotland by a measure of 212 lbs. Do you know anything of such a custom; a boll it is called, I think?—The boll was used in Scotland in the sale of potatoes.

284. Is it not the case that it is used now; a potato dealer told me to-day that it is now being used in his trade?—I have no evidence that it is at present in use for such purpose.

285. Would not the inspectors of weights and measures be best able to tell the Committee what is actually done in different trades as regards weights and measures, seeing that they are in actual contact with traders?—They can offer the Committee valuable evidence within certain limits. They come into contact, for instance, with the retail trade.

*Chairman.*

286. I think you suggested, did you not, that the Committee should ask an inspector such questions?—Yes.

Sir *Samuel Montagu.*

287. Are all the metric equivalents in the schedule to the 1878 Act correct; if not, can you say which are wrong, and what steps should be taken to correct them?—If I refer to any of these equivalents as being wrong, I should have to submit to the Committee the reasons (and they are partly technical and partly scientific) for saying so. These equivalents are legally correct, and certainly, with regard to the weights, no question can arise. Having regard to the time when the inter-comparison of the yard and metre was first made, in the year 1818, it is probable that some persons might consider that a re-comparison of the existing yard and metre might now be made, and that to some extent the equivalent of the metre as given in the Act of 1878 may be in doubt.

Mr. *Stewart Wallace.*

288. Will you tell the Committee why it was considered desirable, in connection with the cran of herrings, to make a special exemption in favour of the fishermen; was it because of the feeling in connection with the trade, or what was it?—The cran, a well-known measure for herrings in Scotland, was illegal until the year 1889.

289. My question is, what demonstration took place, or why was it necessary to make an exemption in their favour by the Act of 1889?—I am unaware; it is a matter more connected with the Fisheries Department. I can only state the fact that the cran was an illegal measure until the year 1889, and had been so illegal since the year 1835.

290. Was there any exemption made in any other trade; is that the only instance where local feeling had to be consulted so far as to lead to a special exemption?—It is the only one of which I am at present aware.

291. Can you state the proportion of light weights which you found in the three and a-half millions which you had for correction last year?—I have ascertained that the total number of weights and measures rejected as being unfit to be stamped, either as being incorrect or otherwise, was 846,457.

292. Have you anything showing the number which was rejected because of being light as distinguished from the other?—Besides those rejected, 1,015,519 were returned by the inspectors to the owners to be re-adjusted, because, although they would pass in other respects, they would not pass as to true weight. I beg to hand in a Return showing these figures. (*The Return was handed in*).

293. My point is, what proportion of the three and a-half million weights which were corrected were light and found to be in use by traders serving the public?—This Return gives a statement of weights submitted to the inspector at his office, one-third of which appear to have required re-adjustment. It does not give any statement showing the number of weights and measures seized as being contrary to the Act; it only refers to the verifier's duty and not to the inspector's duty.

294. But are there no returns kept of improper weights found in the course of the years in use in shops or elsewhere?—No such returns are kept at the Standards Department, except that there is a record of the number of convictions; I can hand in to the Committee the number of convictions throughout the United Kingdom during the past year, if the Committee may so require.

Mr. J. Emerson Dowson, called in ; and Examined.

*Chairman.*

295. You are a member of the Institute of Civil Engineers, I believe ?—Yes.

296. And also Chairman of the Executive Committee of the New Decimal Association ?—Yes.

297. I believe you desire to explain to the Committee your views with regard to the present system of weights and measures and to compare the system at present in vogue with the metrical system of weights and measures ?—Yes.

298. Will you state your views on that matter ?—I shall be pleased to do so, if the Committee will allow me. May I suggest for convenience that I proceed a little in the order in which I have prepared my evidence, as it is rather a large subject.

299. You have, I believe, for many years, especially studied the educational side of the question as well as its commercial and technical side ?—Yes.

300. Are you prepared to give evidence on both those branches ?—Yes, if agreeable to the Committee.

301. We will begin with the educational aspect ; what is your view with regard to the educational aspect of the question of the metric system as opposed to the system which the Committee have heard from Mr. Chaney is called the Imperial system of weights and measures ?—In the first place, I would remark that I consider it much more important now than it was when the subject was last investigated, some 33 years ago. At that time many countries had not a decimal coinage, and but few had adopted the metric system of weights and measures, whereas at the present day the decimal system of coinage has been adopted in every civilised country in the world except Great Britain and some of her dependencies.

302. You will understand that this Committee is not charged with the investigation of the question of decimal coinage, but simply with the question of the weights and measures now employed ?—I merely wish to mention that incidentally. My main point is that the countries mentioned in Table A, which I beg to hand in, representing a population of over 445,000,000, are now using metric weights and measures. It is, moreover, a fact that in no single instance has any country given up the decimal system after once adopting it. (*The Table was handed in.*)

303. What are the countries in Europe in which the metric system is not adopted ?—The only other country I know of with certainty, except our own, is Russia. I have some doubt about Denmark. Previously I thought Denmark had adopted the metric system, but I do not know about it definitely, and therefore I do not include that country in my Table.

304. Can you obtain any information for the Committee as to Denmark ?—I will endeavour to do so. I understand that in previous evidence some doubt was expressed as to the metric weights and measures being used in Servia and Turkey, and I think it well to point out that, according to the "Statesman's Year Book," they are in use in both those countries. Further than this, the British Chamber of Commerce, at Constantinople, reported on the 2nd November last as follows :—"There is no doubt that if the metric system were adopted in England, it would, in a very great measure, facilitate commercial transactions between this and that country, inasmuch as the kilo and the metre are almost invariably used here in all sections of trade ; moreover, the Turkish Government have adopted the kilo as their official standard of weight. An English trader doing business with this country is clearly placed at a serious disadvantage compared with his French, Austrian, and German competitors, who, with their kilo and metre, are better able to strike their bargains than the Englishman, who has first to convert his weights and measures into their metric equivalents. Considering that British trade is being closely pressed by foreign competition, it is essential that anything which tends to make operations difficult should be removed ; and we feel sure that, at least so far as this country is concerned, our complex system of weights and measures cannot but militate in a degree against our trade." The Danish Consul in London states that the metric system of weights and measures is not yet used in Denmark. A kilo is two Danish pounds, but in practice a pound is still divided into halves, quarters, and eighths. The measure of length is the old one, but occasionally the metre is used.

*Chairman*—continued.

305. Do they say that the metre is also adopted as the unit of length ?—"Inasmuch as the kilo and the metre are almost invariably used here" are the words. They do not say specifically that the metre is used as the unit of length, but it is inferred.

306. Do you know whether it is so or not ?—I know nothing further than that. As regards Bulgaria, I may perhaps mention that the Foreign Office Report, No. 1300, of 1894, states that : "The metric system is the one now employed throughout Bulgaria, and it is useless for English manufacturers, especially of machinery and hardware, to expect that their potential foreign customers will give themselves the trouble of learning our avoirdupois and dimension tables in order to be able to puzzle out quarters, pounds and ounces, yards and inches, gallons, pints, &c., into their metric equivalents."

307. Have you any other remark to make with regard to the adoption of the metric system in the various countries in the world ?—No, I think that is all I have to say upon that point.

308. With regard to the first point of your evidence, the requirements and regulations issued by the Education Department in relation to the metric system, what have you to say ?—Since 1891 the Code of Regulations issued by the Educational Department has required that : "The scholars in Standards 5, 6, and 7 should know the principles of the metric system, and be able to explain the advantages to be gained from uniformity in the method of forming multiples and sub-multiples of the unit." It is added that as a preparation for this it would be useful to give, in Standard 4, elementary lessons on the notation of decimal fractions. At the present time, therefore, the scholars in our primary schools are actually being taught the principles of the metric system, on the assumption that it

*Chairman*—continued.

will be adopted in this country; and seeing that the scholars are over-worked rather than under-worked, it is but reasonable to ask that the adoption of the new system should come into force as soon as possible.

309. Have you any evidence to bring before the Committee to enforce your opinion that the statement you have just made, namely, that the adoption of the decimal and metric system in schools for weights and measures would be an alleviation to the scholar?—Yes; I think there is a great deal to be said for it in the simplification of the arithmetic that would be taught.

310. Have you made it part of your duty to inquire what is usually believed by those who hold the views which you have expressed would be gained in time by the scholars?—So far as I can gather, and I have read the opinions of a good many authorities, the time saved would be equal to about one year's learning of arithmetic.

311. Are you in a position to give the Committee any information respecting the amount of education in these subjects which is practically given now in the schools. First, can you tell the Committee whether the regulations which you have read are really carried out throughout the land in the schools, and, if so, what amount of time is devoted to the explanation, which it appears by the Code is, at any rate, legal, if not compulsory?—I can hardly offer any definite statement as to that. What I have quoted has been repeated in the subsequent Codes; it came to our knowledge that the inspectors of schools were in many cases not asking any questions on the subject, although the scholars were prepared, and some communications took place with reference to it. There was a correspondence which, I think, was initiated by the School Board of Bradford. I am speaking from recollection, but if you will allow me I would rather refer to the papers, because I cannot speak quite definitely about it.

312. Can you give the Committee any reference to any book or information at your disposal in answer to the question I put to you as to whether the instruction is at all general to begin with, and, if so, what amount of time is practically devoted to such instruction?—All the books for certain standards have reference to the teaching of decimal fractions in those standards.

313. It is not the decimal fractions so much as the metric system with which the Committee have to deal?—I cannot answer definitely with regard to the amount of teaching of the metric system.

314. You will perhaps obtain for the Committee the information?—I will endeavour to do so. [Mr. J. H. Yoxall, General Secretary of the National Union of Teachers, states that the time now given to the teaching of the principles of the metric system varies in different schools. He estimates that on an average it is half-an-hour per week, in each of the three standards referred to (V, VI, and VII), and as the total time given to arithmetic in each of these standards is usually five hours per week, the teaching of the metric system may be taken as one-tenth of the whole.]

315. You, I believe, have prepared some book for facilitating teaching in this particular?—Yes, I have prepared two pamphlets (they can hardly be dignified by the name of books) dealing with this special subject for the primary schools.

316. Will you hand those in to the Committee?—Yes.

317. I understand they consist of two parts, one for Standard 4, and another for the subsequent three standards?—That is so.

318. Are they used at all in schools?—To a small extent, I think. There are others also.

319. Have you any evidence from the Continent, where the decimal system and the metric system are in use, with regard to the question of the curtailment of the time which you mention as amounting to one year of school time in English schools which bears out your statement?—May I in a few words describe what is done there as compared with what is done here. In this country the decimal fractions are usually taught after vulgar fractions, and are treated as rather advanced arithmetic. They are also taught in a way which makes the subject appear much more complicated and involved than it really is. Professor Frank E. Marshall, of Harrow writes: "The trouble caused by ill-considered teaching is even worse in the treatment of the metric system. Most text-books introduce this subject by stating the equivalent of a metre in inches, or even ten-thousandths of an inch. They fix the pupil's attention on the conversion of values, quantities, and measurements from one system to the other." In the primary schools on the Continent there is nothing more impressive than the great simplicity of their arithmetic as compared with ours. In the first place, the scholars are taught to count by units, tens, hundreds, &c., and then to add, subtract, multiply, and divide whole numbers decimally, as in this country; for, after all, our system of notation is decimal, as it is based on counting by tens, and when we write down figures in a row we know that the furthest to the right represents so many units, the next to the left so many tens, the next hundreds, and so on. Up to this point we do the same as our foreign neighbours; but when we want to express fractional parts of a unit we generally adopt another system altogether, and use vulgar fractions. On the Continent, however, the unit is divided into tenths, hundredths, and thousandths, and a point or comma is placed between the whole numbers and the fractions. The figures are then added together, subtracted, multiplied, or divided, just as if they were all whole numbers.

320. You think, then, abroad decimal fractions are taught immediately after the whole numbers, do you?—Yes, I know it to be so.

321. It has been urged against the adoption of the system that the number 10 is not divisible by certain numbers; have you any remark to make upon that point?—No doubt it is true that the number 10 is not divisible by certain numbers, as, for instance, by three without remainder, and it is sometimes urged that this is a fatal objection to the use of the decimal system. But the advantage of having a system of weights and measures in keeping with the basis of notation far outweighs this objection.

322. Are there any cases in which, in your opinion, vulgar fractions should be used as against decimals?

*Chairman*—continued.

decimals?—Certainly, wherever it is more easy or simple to do so; and, as the late Professor De Morgan remarked, "It is an abiding delusion of the opponent of decimals that he will suppose the decimalist to be under a contract never to use a common fraction." Decimals are not upheld as exclusively right, but rather as pre-eminently convenient; and when in certain cases it is quicker or more accurate to use vulgar fractions, undoubtedly they should be used.

323. In fact, you agree with the proposition, do you, that no system is the best under all circumstances?—Certainly.

324. Is it your opinion that wherever a decimal system has been adopted there has been no trouble in sub-division?—That is so; in fact, the importance of dividing without a remainder has been greatly over-rated, and actually all scientific work at the present day is based on the metric measures.

325. The metric system and the decimal system are two different things; you may have a decimal system and teach decimal fractions and continue to adopt the yard and pound, may you not?—That is so, but what I meant to refer to was the point of dividing with a remainder.

326. With regard to the metric system, in which the Committee are specially interested, in your opinion are the composite Latin and Greek names necessary or unnecessary; can you propose any other names, or any system of names, which might be more agreeable to the ear and to the tongue of Englishmen?—There is no doubt that the Tables given in the text-books are usually complete and symmetrical; but many of the long names they include are not used for ordinary purposes, even in France, where they originated. In the primary schools in Germany it is usual to teach the units and sub-multiples, and only a few multiples, such as hectolitre, kilogramme, kilometre, &c. On this point, I may say that, if agreeable to the Committee, Mr. Alexander Siemens, of Messrs. Siemens Brothers, will tell the Committee better than I can what is actually taught in the schools of Germany. He was in Germany at the time the change was made there to the metric system of weights and measures.

327. What are the three units and the sub-multiples which you would propose to use in the metric system?—For all practical purposes the advantages of the metric system can be secured by the use of three units, metre, litre, and gramme, with the sub-multiples of each as shown in Table B., which I hand in. For the purpose of symmetry, I have included decimetre, decilitre, and decigramme in Table B.; but in the ordinary affairs of life these terms are not used.

328. Are you in favour of the gramme as the unit of weight, or the kilogramme?—For the ordinary affairs of life the kilogramme certainly is more convenient. May I be allowed to add to what I have said that to those three units it would be well to add the terms kilometre, hectolitre, and kilogramme, which are no more difficult to understand or remember than such words as subtraction, multiplication, avoirdupois, telegram, barometer, thermometer, &c. It is altogether a mistake to suppose that it is necessary for us to learn a long list of difficult foreign names.

329. With regard to the simple relation of the



*Chairman*—continued.

metrical units to one another, the Committee, I think, have heard sufficient from Mr. Chaney on that subject, but have you anything further to add with regard to that relation?—No, except to emphasize the fact that the simple relations between the units are of great use in all kinds of work and calculations.

330. Have you any illustration which you can give with regard to the weight of a substance which may easily be found in terms with reference to its bulk?—We only have to multiply the volume or bulk of the substance in question into its specific gravity, and we shall know its weight. Or, conversely, if we know the weight of any substance, we can easily find its volume by dividing the weight by the specific gravity. For instance, the weight of a boat-load of corn, lime, stone, or other substance, can be easily ascertained by multiplying its length, breadth, and depth in metres by the specific gravity. The result will be the weight in kilogrammes.

331. Is that process, do you think, carried out on a large scale in countries where the metric system is used?—It is the everyday practice, so far as I know. I can speak more with reference to France than other countries; it certainly is so there. Slide rules are used a good deal abroad, and on those and in the technical pocket books it is customary to give the specific gravity of common substances, such as wood, coal, lead, iron, and stone, for the purpose of making these very calculations.

332. So that by measuring up the volume in a cargo of coal or grain, and knowing its specific gravity, you would at once arrive at the weight in kilogrammes?—Quite so; it is very simple.

333. Whereas in our system, what would the process be?—It is rather a complicated one. You have a good many reductions to make, and the trouble also is that the volume unit is sometimes a gallon, sometimes a cubic foot, sometimes a cubic inch, and there is no uniform basis upon which to compare various substances.

334. You think it would be a gain to have a uniform volume unit of water, do you?—Certainly.

335. For what reason?—That the calculations of volume and weight of other substances are then simple and rational.

336. Historically, can you tell the Committee whether the duodecimal in England is old; what was the Saxon measure employed?—I cannot go back quite so far as the Saxons, but I find from the "Encyclopædia Britannica" that, as far back as the thirteenth century, the old English mile was divided into 10 furlongs, 10 chains, and 10 fathoms, so that, practically, they had the measure of length divided decimally.

337. Were the smaller measures of length divided decimally too, do you think?—No, not beyond that. I may also point out that the yard of the fifteenth century was equal to 39·66 of our present inches, so that it very nearly approximated to the metre, which is equal to 39·37.

338. Was that a legal measure in those days?—I imagine so. My statement is taken from an article written by Professor Flinders Petrie in the "Encyclopædia Britannica."

339. I believe you have prepared a table showing a comparison of calculations as regards complication or simplicity of calculations made with

*Chairman*—continued.

existing weights, and those made with the metric system?—Yes. (*Tables were handed in*).

340. Will you state shortly what the results of the tables which you have handed in are?—Perhaps a glance at the table itself will be better. What it does mean is familiar to all here, I think. It is the great saving in figures. You have on the one hand a great many reductions and involved calculations with our present weights and measures, and on the other you have the simple addition, subtraction, multiplication, or division.

341. In your opinion, is the saving of time proportionate to the saving of figures?—To a great extent, but I should hardly like to put it in that way. The saving of figures is, of course, important in itself, but there is also more accuracy.

342. Do you tell the Committee there is a saving of time, as well?—Yes, undoubtedly, and also less risk of error.

343. Why is there less risk of error in one case than in the other?—In the weights we now use to add together tons, cwts., quarters, pounds and ounces, we must first add up the ounces and divide by 16, then the pounds and divide by 28, then the quarters and divide by 4, then the cwts. and divide by 20, and in each case we must carry forward a number resulting from the reduction. If we used the metric system, any number of tons or kilogrammes, and any number of fractional parts could be added together by simple addition. The same is true of measures of length, surface, and capacity; in all cases the addition, subtraction, multiplication, and division decimally can be done by simple arithmetic.

344. We have heard of persons accustomed to add up figures with three fingers, running up the pounds, shillings and pence together, and coming to a correct conclusion, showing that such sums can be done quickly?—Yes, by a gifted few; I have not that facility.

345. Do you think that the metrical system does not involve the consulting or learning or remembering a large number of inconsistent and incongruous tables?—It certainly does not.

346. These tables have to be learnt by children at school, have they not?—Yes.

347. And that is, as we all know, a serious undertaking?—Yes.

348. It has been urged by some that the present system, which you define as a complex system of arithmetic, is good training for scholars; is that your opinion?—No doubt you can make excellent training of it, but I venture to say you can make equally good training of the metric system. I think it would be very serious indeed if the mental gymnastics, so to speak, were in any way to be lost, as I am inclined to the belief it is more important for young scholars to cultivate the power of learning than to acquire actual knowledge.

349. Do you think the exercises in schools should have reference to the subjects of daily occurrence in after-life?—In a reasonable way, certainly.

350. And do you think the adoption of the metrical or decimal system would tend to that end?—I think so, and I base my opinion chiefly upon this, that I have examined a good many foreign books of arithmetic, and in all of them I find endless examples based on the metric system, which are at least as good as those in our own English arithmetics.

*Chairman*—continued.

351. Since the Report of the Committee of 1862, have any changes to your knowledge taken place with regard to the system, or want of system, of weights and measures?—We have heard, I think, from Mr. Chaney, that a great many of the anomalous weights and measures have been given up; but there are still a good many unauthorised customary weights and measures in use. For instance, in London and elsewhere meat is sold by the stone of 8 pounds; wire, especially that used for carding and weaving, is sold by the stone of 12 pounds, and in several districts wool is sold by the stone of 16 pounds. In Scotland, I am told, the wool stone is 24 pounds.

352. According to the Weights and Measures Act of 1878 the bushel is to contain 8 gallons, and each gallon represents the bulk of 10 pounds of water at 62 degrees Fahrenheit. In your experience, is this adhered to, or not?—From information I have been able to get, I should say certainly not in many cases.

353. Have you any examples to give the Committee of this non-adherence?—Yes; I have a Report from the Secretary of the Nottinghamshire and Midland Merchants' and Traders' Association, which I beg to quote.

354. Is this Report a recent one?—Yes, I got it this morning; it was written a few days ago.

355. Is the information in it up to date?—It is information as to what is now occurring. "In Cornwall, a bushel of potatoes is still sold as 224 lbs., and in Nottinghamshire as only 84 lbs. In Nottingham the equivalent weight of the peck varies as follows:—Apples, 16 lbs; broad beans, 9 lbs.; gooseberries, 16 lbs; kidney beans, 10 lbs.; peas, 8 lbs.; pears, 18 lbs.; potatoes, 20 lbs.; onions, 16 lbs. The Nottingham Market Inspector (Mr. Radford) is of opinion that all varying weights should be equalised, and that there should be one proper standard. In Worcestershire a pot equals 4 pecks, but in various other counties this pot varies from 64 lbs. to 94 lbs. The large commission agents here are frequently puzzled as to the different weights and measures prevailing in other counties, and have to wire back before they understand how to sell the goods."

356. Is that an official statement from the Inspector, or a statement made by the Inspector?—This is a letter or Report from the Secretary of the Nottinghamshire and Midland Merchants' and Traders' Association.

357. But he quotes something there from the Inspector, does he not?—Yes, just those few words; all the rest is his own letter. Then he goes on: "English fruit in Nottingham is generally sold wholesale by the cwt., but the standard of weights and measures differs in most of the fruit-bearing counties in Great Britain, and therefore the confusion, time wasted, and calculations to be made, trouble wholesale fruit merchants very much. One fruit merchant says: 'The anomaly and startling difference in weights and measures in our trade is a perpetual harass, annoyance, and inconvenience.' As to cheese, Cheddar and Stilton are sold at 112 lbs. per cwt., but Cheshire and

*Chairman*—continued.

and Derby at 120 lbs. per cwt." All that is a quotation from the letter.

358. What is the nature of that society; do you know anything about it?—No, I do not, particularly.

359. Can you give us the name of the gentleman who wrote the letter?—Robert Mellors.

360. Have you any statement to make with regard to the use of avoirdupois and troy weights in the different trades?—I may mention that a dealer in iron, cement, soap, salt, coals, sugar, &c., must adopt the avoirdupois basis of tons, hundredweights, quarters, pounds, and ounces of 437½ grains each. A wholesale dealer in goods retailed by chemists buys by the pound avoirdupois, but sells by the pound troy, which consists of 12 ounces of 480 grains each. We thus have the avoirdupois pound equal to 7,000 grains, while the troy pound is equal to 5,760 only of the same grains; and there is the anomaly that the troy ounce is heavier, while its pound is lighter than the avoirdupois. The troy pound, divided into ounces, pennyweights, and grains, is the standard at the Mint; but dealers in gold and silver bullion use the troy ounce divided into 1,000 parts. As regards coals, Messrs. Green, Holland & Sons, steamship owners, and large exporters of coal and coke, have just written: "Contracts are often based, from the Yorkshire district especially, on the ton of 21 cwts., and we ourselves have quotations based on this weight as late as last month. We are of opinion that the adoption of the metric weights would be an advantage in our trade, especially with reference to dealings abroad."

361. Have you any other data with regard to eccentricities of this kind to lay before the Committee?—I have not had time to get more information together; my impression is that there are a good many other eccentricities, but I think, if I may be allowed to say so, the fact must be patent to all that we have a mass of incongruous tables which cause needless worry and loss of time to all classes of the community.

362. What effect do you consider the present system has on trade?—If this country were isolated, and not dependent commercially on its dealings with foreign countries, its idiosyncrasies, if I may so call them, as to weights and measures might perhaps be treated as of less importance. This, however, is by no means the case; and we should remember that in former times English merchants, engineers, and manufacturers undoubtedly had a much greater command over foreign markets than at present, and that to a certain extent they could with impunity force their customers to base their calculations on English weights and measures.

363. But now, do you think the system of weights and measures in existence acts prejudicially on our foreign trade?—Yes. In Europe we are chiefly in competition with makers in Belgium, France, and Germany; and the metric system of weights and measures is not only used in all those countries, but also in nearly all those where the competing makers sell their goods. This places us at a disadvantage with foreign buyers, who naturally prefer to deal in weights and measures they are familiar with. Mr. John Spencer, maker of iron and steel tubes, of Wednesbury, writes: "There is no doubt that this country stands at a great disadvantage



*Chairman*—continued.

when competing abroad with countries which have adopted the metric system."

364. Have you any other practical examples to give the Committee?—Messrs. Jonas and Colver, of the Continental Steel Works, Sheffield, write: "We have done a large trade in foreign markets for a great number of years, and we have generally found it most desirable, if not absolutely necessary, to offer the goods by metric measures and weights."

365. Are these communications of a recent date?—Quite recent. They add that on seeing a gentleman on the Continent the other day, about a large order, he remarked "that he had not thought of asking English firms to compete, as they usually quoted by their own measurements and weights, which he did not understand, and would not trouble to convert into the metric equivalents." Messrs. Davy, Yates, and Hicks, manufacturing chemists, Southwark, write: "We use the metric weights and measures in the execution of orders for exportation to the principal countries of Europe, South America, &c. Our correspondents in said countries almost invariably require their goods to be weighed and packed according to the metric system; that is to say, in bottles, or packages, containing one or more kilogrammes, or a sub-division of the same, say 100 grammes, 25 grammes. We may add that a very large number of firms engaged in the export trade, in all its branches, are, like ourselves, constantly called upon to use the metric weights and measures in the execution of their orders, and that should the Act of 1878 be enforced, making it illegal to use said weights and measures, very great injury and loss to the trade of the country will result therefrom." Messrs. Denny Brothers, shipbuilders, of Dumbarton, write that "up till now England, in shipbuilding and engineering, has taken the first place, so that other countries have had to conform to our weights and measures in building vessels; but now that the other countries are coming into strong competition with us, this is no longer so true, and later it will be less so."

366. You, I believe, have had considerable experience of your own with regard to contracts in different countries. What is your experience on that subject?—I have had a good deal to do with foreign contracts, and my experience bears out the statements I have read to you generally of the evil effects produced on those engaged in foreign trade, in consequence of the present system. I would rather take the opinion of the different firms I have quoted with reference to their own particular trades, but, generally speaking, I am certainly of that opinion.

367. Speaking as an engineer, can you say from your own knowledge that that is so?—Yes, and I can say this: that in architectural or engineering drawings it is of very great convenience to use the metric measurements; for instance, when the dimensions are under a metre, they are all written usually in whole numbers as centimetres for large measurements, and as millimetres for small measurements. It is much easier to add up, subtract, multiply, or divide these than if feet and inches were given, especially if there are eighths, sixteenths, and thirty-seconds of an inch. It is also easier to compare any number of tenths or hundredths than eighths, sixteenths, and thirty-seconds. Again, it is

*Chairman*—continued.

often more easy to check the main dimensions with the detailed dimensions than would be the case if they were given in feet and inches, especially where there are eighths, sixteenths, and thirty-seconds, which is a frequent occurrence in England.

368. Have you any information to give the Committee with regard to the reports of British Consuls on the subject upon which we are engaged?—Yes; towards the end of last year the Secretary of the New Decimal Association sent out circular letters to several of the British Consuls abroad asking them to reply to the following questions: "(1) Have cases come within your knowledge where English manufacturers or exporters have suffered by reason of purchasers in the country where you reside finding difficulty in understanding quotations in English weights and measures? (2) Do you know of cases where English trade has suffered because the machines or goods offered for sale have been made to English instead of metric weights and measures? (3) If the metric weights and measures were adopted in England would English manufacturers and tradesmen benefit in the country you live in, and for what reasons?"

369. To those questions you received a number of replies, did you not?—Yes.

370. Do you put those replies in?—Yes, I have done so.

371. Without quoting from them, will you tell the Committee, as shortly as possible, the upshot of these replies. Are they favourable towards the decimal system, or are they unfavourable?—Most distinctly favourable.

372. Are they all favourable, or is there any exception to the view which you say the majority take?—There are one or two, if I remember rightly, who do not give an opinion as to what the effect might be, but the majority most certainly are in favour of our adopting the metric system here.

373. Are those replies from very varied quarters of the globe?—Yes; Rotterdam, Milan, Constantinople, Rouen, Flushing, Marseilles, and all parts.

374. Have you any remark to make with regard to the public notice of the Consul General for Peru?—Yes, I think it would be well to state that in December 1891 the Consul General of Peru in London gave public notice that in future it would be necessary to comply with the following regulations in making out consular invoices: "In invoices of articles made of cotton, wool, linen, or silk, the length of each piece contained in the package must be given in metres. In all cases the weight in kilogrammes must be declared on the invoice."

375. As regards that recommendation or statement, then, the Weights and Measures Act of 1878 is in direct contradiction, is it not?—Apparently so.

376. What have you to say with regard to the attention which is now being given to the adoption of the metric system, or otherwise, in the United States?—I think I am right in saying it is receiving there increased and serious attention.

Sir *Samuel Montagu.*

377. Are you aware that information was received by cable yesterday that a Commission on Weights and Measures has been appointed in the United States for these very purposes?—No.

*Chairman.*

378. It perhaps will not necessitate your stating what has taken place previously if the Committee now know that a Commission is sitting on the very question?—That may be so.

379. What you are about to state becomes a matter of history, does it not, under those circumstances?—I think not altogether. In a paper read before the Boston Society of Engineers, on the 12th of March 1890, Mr. B. A. Gould, a member of the International Committee of Weights and Measures, and President of the American Metrological Society, remarked: "You should be fully aware of the wide extent to which the metric system has already been definitely adopted; nothing standing in the way of its universality among civilised nations, except the prejudices of the English-speaking people, and their reluctance to make changes, even for the better, when their pecuniary advantage is not conspicuous." On the 10th of July 1890 the President transmitted to Congress a letter from Secretary Blaine, accompanied by a report on weights and measures, unanimously adopted by the International American Conference. Mr. Blaine in his letter says: "This report recommends the adoption by the United States of the metrical decimal system of weights and measures, which is now in use by the Governments and people of all the other American Republics and most of the nations of Europe, and which is already authorised by the laws of the United States. The adoption of this system in the Customs' Service would, it is believed, greatly promote the public convenience." More recently, on information from the United States Consul General in Paris, the United States Consular Officers were instructed to refuse to certify invoices of goods consigned to the United States, on and after the 1st of September 1893, unless the merchandise were invoiced in accordance with the metric system. This was done to prevent fraud, to simplify the transactions, and to aid the comparison of invoices and invoiced prices. In April 1893 the United States Superintendent of Standard Weights and Measures (Mr. T. C. Mendenhall) issued a bulletin to the effect that the international prototype metre and kilogramme had been accepted as the fundamental standards of length and mass, and that the customary units, the yard and the pound, would be treated as derived therefrom. In speaking of the importance of adopting the metric weights and measures for goods exported to Mexico and to Central and South America, a writer in the "Engineering and Mining Journal of New York," remarks that the goods sent to those countries should be made in sizes and shapes that the buyers are accustomed to, and he adds: "If we are going to contest with England the commercial control of this hemisphere, why should we not take advantage of her obstinacy, and, by suiting her customers, get them away from her?"

380. Is the name of that writer given?—It is a quotation from the "Engineering and Mining Journal of New York." The American Society of Mechanical Engineers is now endeavouring to get the various engineering societies of Europe to agree to an international gauge for measuring flats and rounds. The subject is an important one,

*Chairman*—continued.

one, but England holds aloof, because she has not adopted the metric system, and if a metric gauge is decided on by all other countries it will be awkward for England.

381. Will you explain what is meant by "flats" and "rounds"?—It relates to bar iron, chiefly, flat bars and round bars. In July 1893 the Engineering Congress held at Chicago passed the following resolution: "That a uniform system of testing materials is desirable for purposes of exact comparison." This has reference to an international system based on the metric weights and measures, and if England does not use these the advantages of a general system of testing will, to a great extent, be lost to English manufacturers.

382. In your opinion, if metric weights and measures were adopted in Great Britain, do you think they would probably be adopted throughout the civilized world?—I think there is no doubt about it whatever. Russia would be the only large country left, and I think I am right in saying (in fact, it is referred to in the previous Report in 1862) that they would follow our steps, in all probability.

383. Have you made yourself acquainted with the objections which are urged against the metrical system?—Yes; it is urged that the metre is not strictly the ten-millionth part of the quadrant of the meridian passing through Paris.

384. We need not consider that. What other objections have been raised?—That it is impossible to weigh the water at 4° centigrade in a vessel at 0° centigrade. Those, and two other points which have been explained by Mr. Chaney, are the only ones I know of.

385. You cannot point out any other objections, can you, which have been raised?—No, those are the only ones I know of.

386. We also have it stated, I think on good authority, that in scientific investigations the metric system is used in all countries; from your knowledge can you say that is so?—Certainly.

387. What proposals have been made for decimalising existing weights and measures?—There have been several ingenious proposals, and some of them, no doubt, would improve our present system, but I entirely agree with the Report of the Select Committee of 1862, that "it would involve almost as much difficulty to create a decimal system of our own, as simply to adopt the metric decimal system in common with other nations."

388. Whilst it would not have the advantages, would it, which you have been pointing out?—Quite so; and may I add this as a quotation from the Commission appointed in 1861 to report on the adoption of the metric system in Germany. It says: "Certainly in the present state of things we must not try to attain unity in measures and weights by new creations, but by giving our help to something that already exists, that has a good foundation, and that is already tolerably widespread. . . . The metre and the metre alone has a reasonable chance of becoming the true universal measure of the civilised world."

389. Many persons fear, do they not, that the difficulties to be encountered after the change of our weights and measures render such a change inadvisable, if not impracticable; have you any



*Chairman*—continued.

remarks to make upon that question?—I cannot help feeling that these difficulties are exaggerated, and I think we should remember also that, thanks to the greater spread of education, there will be less difficulty on the score of understanding a new system than would have been the case before education was made compulsory. Nor are we to suppose that an average Englishman is less intelligent or less capable of learning new weights and measures than an average foreigner from any other country.

390. And yet in all these other countries the change has been made, has it not?—Yes.

391. It is usually supposed, is it not, that the change from the ordinary or complicated system of weights and measures in Germany to the metric system, which is now very largely, if not universally, employed, was decided upon at the time of the Franco-German War; is that your opinion?—No, that is really a mistake.

392. How was it then?—Perhaps the best way of answering that question will be to tell you that, at the request of the Associated Chambers of Commerce, the Foreign Office ascertained definitely, in May 1894, what steps were actually taken to introduce the metric system in Germany. This elicited a complete and interesting set of documents, from which I have prepared the *résumé* given in Appendix F.

393. Will you tell us, as shortly as you can, how the system was adopted?—The first movement in favour of the metric weights and measures in Germany was before 1860. A commission of experts was then appointed to study the question, root and branch, from a German point of view, and they reported in favour of the metric system in 1861. Finally, in August 1868, an Act was passed which made it optional to use the metric weights and measures, as from January 1870, and compulsory to use them as from January 1872, or under three and a half years after the passing of the Act.

394. That is to say, in the North German Confederation?—Yes.

395. Has anything been done since then?—I might mention that in the Act of 1868 the retention of some of the old names was allowed; such, for instance, as pound, ounce, pint, &c.; but experience showed that this led to confusion, and the old names were subsequently abandoned.

396. In what year was that?—Most of the old German names authorised by the Act of 1868 were abolished by an Act of 11th July 1884. A further Act of 26th April 1893 made the use of the metric names compulsory.

397. Now, I understand that the words "gramme," "kilogramme," "metre," "decimetre," and "millimetre" are employed universally in Germany; or, at any rate, they are legal?—Yes.

398. And the sole legal measures?—Yes, I believe so.

399. Have you anything to say about experience of a similar character in Sweden?—I have a letter from Mr. Thomas Nordenfeldt, which I think is interesting, and if you will allow me I will read a quotation from it: "Previous to 1855 Sweden had a number of different standards, the same as in England, and no decimal parts of them. On 31st January 1855 the skelpund (Swedish pound) was divided into decimals, and

*Chairman*—continued.

the Swedish fot (foot) was also divided into decimals. On 12th November 1878 the complete metric system was ordered to be introduced on 1st January 1881 for the Customs, Post, Railways, and Civil Service generally, and on the 1st January 1889 for trade exclusively. Since then the old measures have vanished. The decimals applied to the old measures in 1855 only assisted in the arithmetical calculations, without assisting the trade with foreign countries. The experience gained showed that the change to the complete metric system was easily carried through, thanks to the arrangement by which two years' delay only was given for public institutions, while 10 years were granted to the general public. The advantage of the complete metric system has proved immense, especially for foreign trade."

400. With regard to our own country, and with regard to the opinions of trade councils and of chambers of commerce on this question, are you prepared to give the Committee any evidence?—Yes, I have some statements to make which I think are important. First of all, I may say that the Edinburgh Chamber of Commerce urges that if the metric weights are used the Government should make the following concessions. The Postal Union rate is 15 grammes for 2½*d.*, or 25 centimes, and this is equal to 231½ grains, whereas half an ounce equals 218¾ grains. They propose, therefore, that 30 grammes should be allowed instead of one ounce, and one kilogramme instead of two pounds. This they consider would be a great advantage to the people, and not a great loss to the Government.

401. What opinions have you gathered from the associated chambers of commerce in this regard?—All the 72 associated chambers of commerce, as well as the four important chambers which are not members of the association (Edinburgh, Glasgow, Liverpool, and Manchester), strongly advocate the adoption of the metric weights and measures. They have all passed resolutions in favour of it.

402. Are there any school boards who have directed their attention to the matter?—The following school boards are supporters of the metric system, and others are known to be favourable to its adoption: Ashton-under-Lyne, Birmingham, Burslem (Staffordshire), Burton-on-Trent, Coventry, Derby, Hartlepool (West), Hove, Hull, Ipswich, Leeds, Leith, Leicester, London, Manchester, Norwich, Oldham, Plymouth, Salford, Sheffield, and Swansea.

403. Have all those school boards passed resolutions in favour of the adoption of the metrical system?—They have.

404. What do the teachers say about it; because they are an important body, and it will touch them, probably?—The importance of the question is fully recognised by them, and at their annual meeting at Oxford last year they passed a resolution unanimously.

405. Who passed it?—The National Union of Teachers. The resolution was: "That in the opinion of this Conference the time has arrived when the interests of commerce and education demand the introduction into this country of a decimal system of money, weights, and measures."

406. What do the inspectors of weights and measures say; have they ever expressed any opinion with regard to the matter at all; they have a society, I believe?—Yes; the Incorporated Society of Inspectors of Weights and Measures recommend the adoption of the metric system.

*Chairman*—continued.

407. And what about trades councils; have they said anything?—Yes; I put in a list of the trade councils in favour of the metric system.

408. Have each of these bodies mentioned in the list passed resolutions on the subject, or are these simply letters received from the secretary or president expressing their personal views?—These councils, representing a very large number of members, have not only expressed themselves in favour of the adoption of the metric weights and measures, but their representatives have been instructed to co-operate with the New Decimal Association.

409. Do you mean to say that they in meeting assembled have passed resolutions?—Yes; and the Trade Union Congress, held in Glasgow in September 1892, passed the following resolution: "That in the opinion of this Congress it is highly desirable, in the interests of the working classes and of the general trade of the country, that the decimal system of weights, measures, and coinage shall be adopted in Great Britain and Ireland as a national system, and that the Parliamentary Committee be instructed to promote legislation on the question." At this congress there were 495 delegates present, representing 1,219,934 members. At a congress held in Belfast in 1893 a similar resolution was passed, and 380 delegates were then present, representing 900,000 members.

Mr. *Stevenson.*

410. They do not mention the metric system, do they, but only the decimal system?—Yes, a decimal system of weights, measures, and coinage. I have reason to believe they favour the metric weights and measures.

*Chairman.*

411. You have given the Committee a great amount of information in favour of this system. You have also stated your opinion as regards certain objections which have been raised. Can you give the Committee any information as to persons, societies, trade councils, or individuals objecting to the system?—No, I cannot say that I can. Of course, I have met individuals who are not in favour of it, but I do not remember any public bodies which have ever expressed themselves in that way.

412. Have any of the retail trades or tradesmen ever issued any statement as against the adoption of the system?—Not that I am aware of, and I think I might add that these trades councils to which I have referred, are, to a large extent, connected with those classes.

413. Do they represent the retail trader?—Perhaps not directly the retail trader, but they represent their customers, and I suppose their associates, their relatives, and so on. May I read the names of a few of them?

414. Yes; pick out a few which you think more characteristic in that respect?—Taking Table G. we have the United Bargemen and Watermen's Protection Society; South Side Labour Protection League; Street Masons, Paviors,

*Chairman*—continued.

Paviors, Stonedressers and Hammermen's Amalgamated Union; Working Men's Club and Institute Union, Limited; United Trades Council, Bolton; Sheffield Trades Council; Glasgow Trades Council; National Union of Gasworkers and General Labourers of Great Britain and Ireland.

415. Do you think those represent the retail dealers?—I should think so.

416. But you have not any evidence to put before the Committee as to the views of the retail dealers, have you?—I have nothing more definite.

417. Personally, have you ever come into contact with any of them, or talked to them?—Not in that sense.

418. Have you any other information you wish to place before the Committee?—There is only one other resolution I should like to add. At a special meeting of the Council of the Borough and County Borough of Leicester, held on the 26th of February last, the following resolution was carried unanimously: "That this Council heartily approve the proposal to adopt the metric system of weights and measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter."

Sir *Samuel Montagu.*

419. You said that Russia had not adopted the metric system. Are their present weights decimalised?—I believe some of them are, but I am not able to state accurately.

420. With regard to Turkey, have not you learned that it has been officially announced that the metric system should be exclusively used?—I believe it has, and I think it is confirmed by the report that I read from the Chamber of Commerce in Constantinople.

421. You mentioned Europe and South America as mainly adopting the metric system. Is it not the fact that Japan has adopted the metric system?—Yes; and I have included Japan in the table I handed in.

Mr. *Godson.*

422. Some people are very much in favour of a duodecimal system of weights and measures, are they not?—Yes.

423. Decimal for coinage, and duodecimal for weights and measures?—Yes.

424. Because it is so easily subdivided, is it not?—Yes.

425. Do you happen to know whether in Denmark the duodecimal system does not prevail, or did prevail, a short time ago?—I am sorry to say I know very little about Denmark, and I cannot answer your question.

*Chairman.*

426. You have promised to obtain for us the information as to whether the metric system has been adopted or not in Denmark?—Yes.

Mr. *Stevenson.*

427. You complained of the complexity of the tables in school books. Is not that complexity to a large extent unnecessary; for instance, you, as a civil engineer, will be aware that land is measured by links and chains; do you turn out your measurement of a field in acres, roods, and poles, or in decimals of an acre?—I agree with you that land is generally measured by chains and links, but the equivalents in acres, roods, and poles often have to be worked out.

Mr. *Stevenson*—continued.

428. Then as far as this very clumsy measurement is contained in school books, it may as well be left out, may it not?—I think not, although I confess the land measurements seem to me of less consequence than weights and measures generally.

429. So that a great deal of educational difficulty arises from the injudiciousness on the part of the preparers of books of arithmetic, does it not?—I do not quite agree with that, because, apart from the land measures, we still have a difficulty with the tons, hundredweights, quarters, pounds, &c.

430. But supposing they abolish hundredweights, quarters, and pounds, and do as they do in the States of America, sell all their bulky articles in pounds, and pounds only, would not that be a very simple system, under which we should not require to adopt a foreign system?—Of course it would simplify the present system, but we should lose the great advantage of having an international system which the adoption of the metric weights and measures would give us.

431. With regard to the facilitating of trade, and the disadvantage to British trade in foreign countries, is not that to a large extent the fault of British merchants and British manufacturers; why should not the British manufacturers turn out their machines and tools of dimensions based on the metric system?—You mean to have two sets of measures and weights.

432. Certainly?—It can be done, and is done to a certain extent, but it is inconvenient.

433. They expect the customers abroad to reduce those difficult calculations, instead of doing it at home, do they not?—I take it that the buying and selling is one thing, and the manufacturing is another. We should not only want to sell abroad, but we should want to make to dimensions which will be convenient to the buyers abroad.

434. Precisely, that is what I suggest. On the other hand, does not your suggestion amount to this: that instead of allowing the small number of our foreign traders to trouble their minds with these dimensions, you would trouble the whole population of our country to learn a new system entirely foreign to them for the convenience of that small amount of foreign trade?—If it is correct to term it a small amount of foreign trade, it would be so. There are better authorities than myself, but I imagine that it is a very large trade, and that we are greatly dependent on it.

435. Compared with the home and internal trade it is not. You suggest that the decimals should be taught first, and vulgar fractions secondly. Cannot you obtain that advantage without introducing any system of foreign standards?—Yes, so far as the arithmetical teaching is concerned.

436. With regard to specific gravity, in the case of a cargo of coal or goods in bulk, does it really matter what the small units are; is not the cargo weighed into the ship in tons on this side and weighed out of the ship in metric tons at the other side?—For shipping in bulk it probably is so. On the other hand, for detailed measurements it would certainly be a great convenience to have the metric system adopted universally.

Mr. *Stevenson*—continued.

437. I am referring to materials in bulk, such as coal or corn; would it be any advantage whatever to the coal and corn trade that they should have the metric unit?—That is quite a trade question for those particular trades, and I would rather rely upon the opinions of the shipbuilders and shippers I quoted; I am not a shipbuilder myself.

438. You have given no reason on the part of the shipbuilders for the change. I always understood that the British ton of shipping was the same as the foreign ton of shipping?—That is so, but the opinions I quoted do not refer merely to measurements in bulk.

439. Have you ever availed yourself of the facility afforded by the fact that a cubic foot of water is as nearly as possible one thousand ounces?—Yes.

440. And that if you multiply the cubic feet by the specific gravity of clear metal you get the weight in ounces per cubic foot of that metal. Of course it is easier to divide by 10 than by 16, but you get, by dividing by 16 into the weight of pounds, the weight of a foot of metal or any other substance, can you not?—That is so.

441. That is a facility of our present system, is it not, in common with the metric system?—But it is not so simple.

442. Is not there the greatest risk of error in all calculations in putting the decimal point in a wrong position?—It is important; but, if I may be allowed to say so, I think there is an impression that the decimal point is more used than it is. For instance, on foreign engineering and architectural drawings they take the dimensions of any part that is being dealt with, and if it is under the metre they simply write in whole numbers the number of millimetres or centimetres, and there is no question of difficulty whatever.

443. In reading off a plan, certainly not, but as the result of calculation there would be, would there not?—Not necessarily, but when decimal points are used care is required.

444. With regard to the fact that the stone is different in different parts of the country, can the law do anything more than it does now; would the introduction of the metrical system do away with that anomaly?—I should have thought so. I do not understand, for instance, why a bushel of potatoes should be sold as 224 lbs. in Cornwall and as 84 lbs. only in Nottinghamshire; the same commodity in both places.

445. The law already declares that to be illegal, and yet people go on doing it; what can the law do to make it better if people will not obey the law now; would the introduction of the metric system make things any better?—I should hope that it would lead to a greater uniformity. Of course, if you leave people simply to themselves they will naturally adhere very much to their old customs.

446. But our imperial measure was adopted some years ago in order to cure that very thing; that there should be the same measure of capacity in all the markets of the kingdom, and yet the people do not use it?—Judging by what Mr. Chaney has said, I should imagine that it has done a great deal of good, and that a great many of the old weights and measures have been abandoned, but that some still remain.

Mr. *Stevenson*—continued.

447. You mentioned the case of a steel tube manufacturer at Wednesbury; cannot he make his steel tubes by centimetres in order to suit his continental customers?—Of course he might, but it is a disadvantage in works to have two systems of measurement.

448. But he makes steel tubes for consumption at home, and he adapts himself to the mind of the foreign customer by another mode of measurement, does he not?—But to make the tubes to foreign dimensions he must alter his tools, unless the two sets of dimensions happen to agree precisely.

449. Then, conversely, by the present system the French maker of tubes would lose trade in England in the same way, would he not?—I had rather been hoping in my own mind that the trade would be flowing the other way, from here to there.

450. He had better, surely, have special machinery suitable for the foreign trade?—He can do so, but it will involve a greater outlay and cause more trouble.

451. You mentioned a Sheffield firm who now offer their goods by metric weight and denominations; why should not everybody else do the same and be equally enterprising?—There is the question, whether it is altogether legal; but, apart from that, it is an inconvenience.

452. You quoted, I think, Professor De Morgan as an authority in favour of the decimal system?—Yes.

453. Are you aware of the evidence he gave in 1862?—I took my quotation from that evidence.

454. Are you aware that he was opposed to the metre as a unit of length?—I think he was.

455. And that he considered the unit of measure too long, and he did not like the kilogramme either; but, as you say, he was in favour of a decimal coinage?—I do not know what Professor De Morgan would have told us now that it has been so much more adopted in other countries; at that time there were only a few countries using the metric system.

456. With regard to Germany, allow me to call your attention to some of the evidence given in 1862. Dr. Karl Kurmarsch was asked, at Question 2946, "Is the present system of measurement by feet a source of much confusion?" and he replied, "Yes, in Germany there are many different feet. We have about 30 different feet. Every State of Germany has a particular foot." Was it ever the case in this country that there were different feet?—I should think not.

Mr. *Wrightson.*

457. In reply to Mr. Stevenson just now, as to the possibility of using both the metric system and the English system in engineering shops, would that entail many extra tools for the workmen; could they use the same scales and rules?—So far as I can ascertain (and I derive my information, I may say, chiefly from the firm of Messrs. Willans and Robinson, who have for the last two years adopted the metric system in their large works), they have measures with the two sets of measurements on them. As regards the tools, they have not found many alterations necessary.

458. With regard to the gauge which is general in the higher class of engineering shops, how would the two systems affect the question of gauges?—

Mr. *Wrightson*—continued.

gauges?—I believe I am right in saying they adopt the millimetre gauge only.

459. Then in that case they would not sell their articles as made by the English system of measurement, would they?—No; I think what they do is this: they still have to make certain portions of their engines by the English measures to replace old parts of engines supplied, and so forth; but for all new work they are sending it out by the metric measurement.

460. Does not that cause considerable confusion?—They say not, and I might tell the Committee that Captain Sankey, one of the firm, is quite prepared to tell them in detail anything they would care to know about that. My information is only second-hand.

Mr. *Crombie.*

461. You spoke of a large variety of different values to nominal measures throughout the country; do not you think those are rather in the nature of over measure than different measure; for example, you spoke of coal being sold at 21 cwt. to the ton; do not you think that has arisen from really giving over measure rather than anything in the value of the measure itself?—I cannot tell you how it has arisen; I only know, as a fact, that certain contracts are based for instance on the so-called ton of 21 cwts.

462. Is it not a fact that the system of giving over measure is adopted to a large extent in different trades throughout the country?—I have no doubt it is so.

463. Do not you think that it would persist, even if the metric system were adopted instead of the other one?—I do not think that particular point bears so much on the metric weights as upon irregular and unauthorised weights being allowed. The ton, for instance, should, of course, be a ton of 20 cwts.

464. Do you understand my point, that I think some of those differences arise from the system of giving over measure?—I think that is very likely so, but if a seller wishes to allow 21 cwts. he should sell by the parcel, and not by the ton of 21 cwts.

465. In regard to gauge, would not any change of gauge in engineering and architecture be attended by great inconvenience; take the case of planks, for instance, which are sawn to round fractions of an inch, a quarter, a half, and three-quarters, which architects and engineers have got accustomed to dealing with, and judging of the strength of those thicknesses; if you translated them to the decimal system, would you not either have an inconvenient fraction to deal with, or have a thickness which would upset all former calculations?—I do not think there would be anything serious in the difference of the calculations, if you mean as to the constants, and so on. It is what has been done in all those countries where the metric weights and measures have been adopted.

466. It is the transition I refer to?—Of course there must be inconvenience from that.

Sir *Edward Hill.*

467. You said, I believe, that all countries outside Great Britain, with the exception of Russia and Denmark, have adopted the metric system?—Yes, in Europe.

Sir *Edward Hill*—continued.

468. And in your opinion it is a commercial and educational disadvantage to this country to be left out in the cold?—Distinctly.

469. And, in your opinion, there should be some very strong reason existing why we should be content to retain this exceptional position?—Yes.

470. Can you tell the Committee any reason of your own, or that you have heard put forward by other people, why our present system should not be changed?—I cannot say that I can. I think questions of old custom are involved more than anything else.

471. I daresay you have given attention to the difficulties that exist in the period of transition in the various countries that have adopted the metrical system?—Yes.

472. Were they of a very formidable character?—Judging by what one has read about France, I should think there were great difficulties, and that those difficulties extended over a large number of years; but, judging by what has been done more recently in other countries, that was probably largely due to the fact that the people were badly educated, and that there were not officials dotted about to tell them what to do to facilitate the change.

473. Was education so much spread then in France as it is here now?—I should think nothing like it at that period.

474. Have you contemplated whether or not a radical change would be productive of any very great inconvenience in the smaller transactions of life?—There must be inconveniences felt, but I cannot think myself that they would be very great.

475. You think that education now is so universal that these inconveniences ought not to be very formidable, do you?—I do think so; and also one should remember that at the present time the younger members of society are learning the principles of this very system.

476. In your opinion, if the metrical system were to be adopted, would it be an advantage to the poorer classes?—I think anything that tends to facilitate the learning of arithmetic and the calculations involved in measures and weights must be an advantage to them, as it would be to others, and that a great deal of time that is now wasted in learning our present system of weights and measures could be devoted to something more profitable.

477. The Committee have been told that it would be less likely to lead to fraud than other standards of measures; do you think if one standard only were adopted there would be less opportunity for fraud than now?—I could hardly speak as to that. I have not had to deal with questions of fraud in a practical way, but I should think one would be right in saying that if a more simple system were adopted there would be less risk of fraud and mistakes.

Mr. *Godson.*

478. Do you happen to know anything about those 21 cwts. to the ton; do you know that the coalmasters now are objecting to the 21 cwts., inasmuch as they have to pay royalty, and also their men's wages, on the one hundredweight?—No.

479. You do not remember the time when a boat-load used to be 23 cwt. to a ton, do you?—No.

*Tuesday*, 12*th March* 1895.

MEMBERS PRESENT:

Mr. Burt.
Mr. Crombie.
Mr. Gibbs.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Stewart Wallace.
Mr. Webster.
Mr. Whiteley.
Mr. Wrightson.

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. ALEXANDER SIEMENS, called in; and Examined.

*Chairman.*

480. YOU, I believe, are a Past-President of the Institution of Electrical Engineers, a Member of the Institute of Civil Engineers, a Member of the Council of the Society of Arts, and a Director of Siemens Brothers and Company, Limited?—Yes.

481. Before we pass to the question on which you are specially anxious to give evidence, namely, the question of the adoption of the metric system in Germany, the Committee, I think, would be glad to hear from yourself what is the action which you, as a director of a very important company, have taken with regard to the measures you employ in that kingdom in your manufactories. First of all, perhaps, you would be good enough to state what it is that you prepare or manufacture in your firm?—We make, practically, all instruments and apparatus which are connected with the application of electricity for use in ordinary life. We make telegraph instruments, cables, dynamo machines, and all measuring instruments of various kinds, in fact nearly everything that is connected with electricity.

482. Your firm is one of the largest, I understand, in that branch of trade in the country?—Yes, it was established in 1847; we have connections all over the world, and that is just the reason why we have been forced into using the metrical measures in a good many instances.

483. Will you inform the Committee when you adopted the metrical system; did you adopt it on the formation of your Company, or since?—We did not use the metrical system, I should say, until 1870, or somewhere about that. Of course, in the German branch we were obliged to adopt the metrical system as soon as it was introduced, but the English house has only been forced to adopt it, say, within the last 15 years.

484. You say "forced;" in what sense do you use the word "forced"?—If we want to do business at all with foreign countries, where the metric system is in force, we have to give our quotations, and write our invoices, and make our instruments in accordance with metrical measurements, otherwise the people will not take them, and will, by preference, go to foreign manufacturers, who are using the metric system.

*Chairman*—continued.

485. Is your trade chiefly a foreign trade, or is it a home trade as well?—I should say it is pretty equally divided. At present we are doing, I think, 27 different central electric lighting stations in England, and that is a pretty considerable trade.

486. And you say you were forced to adopt the metrical system chiefly because you had a large foreign trade with countries in which the metric system had already been adopted?—Yes; but in addition to that we have found out that it is far easier to make all the calculations as to the right dimensions of dynamo machines, for instance, or the right dimensions of cables, the thickness of insulating material, according to the metrical system, and then eventually to reduce them to English where necessary; but to a great extent, workmen are using the metrical measurements for actual work. I have here a scale which I borrowed from one of the fitters which has the metre on one side, and the English measure on the other. Of these measures, there are about 300 in use at our works.

487. Do you supply the metrical units to your workmen, such as measures of length, for example; are they supplied by the firm in the metric system?—No, by the men themselves; this measure is the property of the man from whom I borrowed it.

488. What is your experience with regard to the change which took place about the year 1870, when you changed from the Imperial system of yards, feet, and inches, and decimal or fractional parts of the inch, to the metrical system, speaking of your own works?—It was gradually introduced; to tell the truth, I did not know that it was used to such an extent myself until the other day, when I inquired. I was under the impression that the metrical system was used in the foreign trade, and the English system in the English trade; but I found that that is not the case. All small dimensions are given in millimetres in our works, whether it is for

*Chairman*—continued.

for English work or for foreign, because it has been found by practice to be so much more convenient and easier.

489. Did you find amongst your workmen any great difficulty or any objections raised on the part of the men to the adoption of the metric system as against the inch, and the two-foot rule?—Not at all; on the contrary, they thought it an improvement.

490. And you have not found any difficulty, have you, in that respect amongst the men?—None whatever, because you see a millimetre is a much more convenient unit for small work than an eighth of an inch, or a sixteenth of an inch, or a thirty-second of an inch would be, which is really much more complicated. If you say one millimetre it is much shorter. In fact, the last witness, I believe, told you that the English inch is for such fine work usually divided into thousandth parts; then you have been driven into the decimal system, because it is quite impossible to specify small dimensions on the binary series.

491. In your work, of course, accuracy of dimension is of the very greatest importance, especially in all this fine instrument making?—Yes, and of late years the accuracy of working has been very much increased by the use of machine tools, of labour-saving machinery. At the large works of Willans and Robinson of Thames Ditton, they have made known that they in future will only work on the metrical system on account of the foreign trade, and also on account of the accuracy of the work, because the thousandth of an inch is too small and the millimetre is a convenient size.

492. Are they electrical engineers?—No, they are steam-engine makers.

493. Do you know whether many other English firms, either electrical engineers, or steam-engine makers, have, as you have done, adopted the metric system?—I have heard that Hett's, at Brigg, in Lincolnshire, adopted it some years ago; and, I believe, generally steam-engine makers are obliged to use metric measures when they want to sell steam engines to countries where the metric system is in force.

494. Up to the present time I believe we should be correct in assuming that the majority of English engineers have not yet adopted the metrical system?—No, they have not adopted it throughout their works; they only adopt it, like we do, for a part of their work, especially for that which is destined for abroad.

495. But I understood you to say that the whole of your measurements in your works are conducted on the metric system; is that so?—Yes, all the small dimensions.

496. But the larger dimensions?—The larger dimensions are English for the home trade, and metric for the metrical countries.

497. Do you find now any awkwardness in having the two systems of measures. For small work where great accuracy is needed you use the millimetre, do you not?—Yes.

498. But for articles for home consumption, you use the foot and the inch, do you?—Yes.

499. Do you find any disagreeable consequences in that duplication of the system, or would you like to see the system made uniform?—It is awkward in all cases where patterns have to be made, because it is not nice to have patterns made to some thousandths of an inch; it is much easier to make them to the full inch; but then the pattern would not fit for a metrical country; there we would make the pattern 25 millimetres, say, which is not exactly the same, so that it compels us, in some instances, to have a double set of patterns, a double set of dies, a double set of standards, and that sort of thing. But we have to put up with it, because we otherwise would lose the foreign trade or the home trade.

500. Would you like to see, so far as your works and trade are concerned, the decimal system and the metric system adopted in England?—Certainly. I think it would be a great saving in the actual work of life. We have now clerks working for hours in the evening to reduce the English weights and measures to metrical weights and measures, because some countries will not admit goods unless they are cleared at the Customs according to metric weights and measures.

501. Therefore it would be an alleviation to the work of your trade if a uniform system, and that the metric system, were adopted in this country, would it?—Yes; it would be a very great saving throughout the commercial world. I mean not only in manufactories, but for every merchant.

502. You speak not only for yourself, but you speak generally, do you?—I speak entirely generally.

503. I understand that you have paid a considerable amount of attention to the question of the adoption of the metrical system in Germany. Will you shortly give the Committee a statement respecting the history of its adoption?—Yes.

504. I must ask you to do it as shortly as possible, because we have had from previous witnesses some evidence on that subject already?—The first introduction was made by the Customs Union of Germany, which adopted on the 1st of January 1840 the Customs pound, equal to half a kilogramme, but alongside of this pound each State nearly had a pound of its own until 1858 or 1860, when the Customs pound was made compulsory throughout the Customs Union, which included Austria at that time. But the great point which I want to bring forward is that the subdividing of this unit was left to the individual States, and some of them thought it would be a great convenience for the public if the factor 3 were brought in. Therefore Prussia divided its pound into 30 ounces, and then went on decimally. Other States, like Nassau, thought it would be better to divide the pound entirely on the binary system, so they had 32 ounces, and other States adopted the pound equal to 10 ounces.

505. Then the system was a very complicated one, was it?—They went by pounds; they did not trouble about the fractions in the transactions, otherwise it was very troublesome; but the point is that all these subdivisions, which were made for the convenience of the public, turned out not to be as convenient as the decimal system, and when, in 1868 eventually the law

*Chairman*—continued.

was passed introducing the metrical weights and measures, all these inconvenient subdivisions were swept away and the decimal subdivisions were adopted.

506. That was in the year 1868, was it?—Yes, that was in the year 1868. There was an agitation going on all the time to introduce the metric measures, and a Commission of the old German Federation was nominated in 1861. I believe I need not say anything about their findings, except that there were some objections to the metric system which were raised before them.

507. What were those objections; do you know?—Yes. The first objection was that it was insufficiently accurate, but I think that has been dealt with. The second objection was that it was of foreign origin. That is hardly right, because a large number of French towns petitioned Louis XVI. in 1789 to induce England to join France in introducing an international system of weights and measures, and in consequence of that in 1790 the Academy of Sciences invited the Royal Society of London to confer with them on this point. The Royal Society of London did not respond, but other countries responded, and the first thing they did was to measure the quadrant of the earth between Barcelona and Dunkirk; it was a Swiss delegate who made the report. I mention that to show that it was of international origin.

508. The names, however, of the units are French, are they not?—That was the next objection; but they are really Latin and Greek, and therefore you might call them internationally understandable. In that connection I may say at once that in Germany, on the introduction of the units, German names were invented for the very same reason, that the people objected to strange names. The same thing was done in Holland; the same thing has been done in Sweden; and in all three countries it has been found unworkable. Now in all three countries the purely metrical names, I will not say French names, are in use.

509. Do you think there is anything in the objection that the metre is too large a unit?—The reply which this Commission found to that objection was that the foot is too small. Every nation has introduced, in addition to the foot, something corresponding to the yard or fathom, and for the smaller lengths inches are used. You speak in England here about a 48-inch valve or a 36-inch gas main; nobody says a 4-feet valve or 3-feet gas main; so that if this larger unit has been found more easy to measure with, why calculate with the smaller one?

510. How many of these terms do you practically use in Germany; the terms which were originated in France, but which you say are classical terms?—There are really only four. The basis of the names is, for length, the metre; for surface, the ar (from area); for hollow measure, the litre; and for weights, the gramme. Those four names contain everything which you need know about the metric system. The divisions are done by the Latin words *deci, centi, milli,* and the multiples by the Greek words *deka, hekto, kilo,* and *myria,* but not all of these are in

*Chairman*—continued.

use, and there is a short list of names actually in use in Germany which are allowed by law, as, for length, the kilometre, the metre, the centimetre, and the millimetre; for surface there are the square kilometre, the square metre, the square centimetre, and the square millimetre, and, in addition, the ar; that is 100 square metres; and the hektar, which are 100 ars; then there are the cubic metre, the cubic centimetre, and the cubic millimetre; and, in addition, the litre and the hectolitre, which is 100 litres.

511. Is the word "litre" commonly used in Germany?—Yes.

512. If you go in to ask for a litre of beer, or a litre of milk, would they understand what you meant?—Yes; it is all done by litres. The weights are the ton, the kilogramme, the gramme, and the milligramme.

513. What is a ton?—A ton is 1,000 kilogrammes. It is very nearly the English ton. An English ton is 1,016 kilogrammes.

514. Are the school books which you hand in in general use in Germany?—Yes. Some are of the 55th edition, and others of the 110th edition.

515. Do you know much about the system of school teaching in Germany with regard to the metrical system?—There is no teaching of the metrical system at all. If I might draw your attention to this book, this is a book which the small children use, and quite at the end, at the bottom of the page, it says: "Remember a metre is 100 centimetres, and a hectolitre is 100 litres," and that is all that is said about it. There is nothing to learn.

516. They have no tables, then, such as our children have to learn, have they?—There is no possibility of having a table, because it is the same system as the system of counting.

517. But I see here, for example, 1 dutzend equals 12 stück; and again, 1 mandel equals 15 stück. What does that mean?—That is an expression, as you say here, "a score." A score is 20, so there we say in Germany, a schock is 60, a mandel is 15, and a dutzend is a dozen of course.

518. Those are not legal measures, are they?—No, it is the language.

*Mr. Stevenson.*

519. Are sheep counted by the score in Germany as in England, and eggs by the dozen? No.

*Chairman.*

520. With regard to medical weights in Germany, have you apothecaries' weight at present?—No, they have all been abolished. They use the milligrammes instead; and of course it is a great convenience for French people, or people of any other country which uses the metric system, to be able to take a doctor's prescription into Germany and have it made up there without any fear of mistakes.

521. Have you a system in Germany now by which weights are compared with the original metre, and the kilogramme kept in Berlin?—Yes. The law of 1868 established an office in Berlin which corresponds to the Standards Office of the Board of Trade here, and they have what they call normal weights, or what

are

*Chairman*—continued.

are here called imperial measures and weights, which are compared direct with the original. Then the local governments and the local inspectors of weights and measures have got their local standards and they have to take them from time to time to the Central Standard Commission and have them compared with these normal weights; then the normal weights are compared with the originals, just as is done here in England.

522. Then the system, so far as stamping the weights and measures is concerned, is much the same in Germany as in England, is it?—As far as I can see it is absolutely the same, I mean the same staff who now standardise the English weights and measures could at once standardise the metrical weights and measures.

523. When the metrical system was introduced as legal, and the only legal standard, what means did the State take to reorganise and renew the system of weights and measures throughout the country. Was there a State grant, or in what way were the old weights got rid of and the new weights substituted?—There was time given. You see, the law was passed in 1868 setting forth that new weights and measures might be used from the 1st January 1870, and that they would be compulsory from the 1st January 1872.

524. After two years?—Yes, two years after the first permission. The inspectors of weights and measures could to a certain extent alter them. Of course, the pound, you see, was the same.

525. The pound was the same, because by a previous Act it was made equal?—Yes. In 1870 it was made the unit, not the kilogramme, and that was also found afterwards very inconvenient; it was altered in 1877, and the kilogramme was made the unit, because all the deviations from the metrical system were inconvenient.

526. Then, do you tell us that, inasmuch as the pound was made half a kilo, there was not much necessity for altering the pound, but all the sub-divisions would require alteration?—Yes.

527. For instance, in Prussia, where they had got 30 ounces to the pound, or in Nassau, where they had 32 ounces to the pound, or in Hanover, where they had 10 ounces to the pound, the ounce measures would need to be altered in order to bring them into proper relation with the kilo or the half-kilo, would they not?—Yes.

528. Was that found to be a great difficulty, or how was it accomplished?—A great many of the weights are hollow cast-iron weights, and it was possible to put lead in them, and afterwards, of course, the inspectors of weights and measures stamped the lead so that it could not be tampered with, so that a great many of the old weights could be converted into the new weights.

529. But there would be not only many thousands, but probably millions of weights which might have to be changed, would there not?—Yes. Mr. Chaney said, for instance, that the Board of Trade had adjusted or stamped over 3,000,000 weights in one year. If the metrical system were to be introduced here, in three years the Board of Trade might, in the ordinary course of business, alter 10,000,000 weights without any particular trouble or any extra expense.

*Chairman*—continued.

530. You think, do you, that inasmuch as a very large number of weights are regulated or inspected, and altered every year, there would not be a great deal of difficulty in making these weights correspond with the weights of the metric system?—No, I do not think so. In the first instance the two-pound weights want only an addition of a little over three ounces to be a half-kilo, and three ounces of lead are very easily added, because most of these weights are hollow.

531. Can you tell us, for example, what you would do with the ounce weight, which is a weight very commonly used in England; how would you alter the ounce weight to make it a satisfactory multiple of the gramme?—I would cut off a small portion and convert it into a 25-gramme weight.

532. The present ounce being how much?—Just under 30 grammes.

533. Then you would make the new ounce, if I might call it so, 25 grammes, would you?—Yes.

534. And do you think that might be done without any difficulty?—Yes.

535. Have you any other remarks to make with regard to the Articles of this law of 1872 on your *précis*?—No, I would call your attention to this book, which gives the way in which the matter was introduced. These tables were published at the time giving the new units and the proportion of the old units to the new officially, just the same as here in England the Act of 1878 gives the exact equivalents of the metrical system in the English weights, and of the English weights and measures in the metrical system. (*The Witness handed in the book.*)

536. Was that pamphlet widely distributed?—Yes; and there were a lot of these tables published, and examples were also given, so that the people should be able to convert the old prices into the new without much trouble.

537. Were these tables issued by the Government or by private firms, and sold to anybody who wished to have them?—They were made by private firms, but the proportions between the old and new weights were, of course, given by statute. I have here two or three more pamphlets of the same sort, showing a convenient way to get from the old measure to the new.

538. And during the time when the system was in process of being carried out, before it was made absolutely compulsory, was any instruction given in the schools in regard to the change which was about to take place?—Not particularly, because the metric system had been taught in German schools for many years. When I was at school many years ago we always had to work with the metrical system by way of practice; but, as I said before, the metrical system has really no calculation of its own, because it is like working with ordinary numbers.

539. Do you mean to say that when you were at school, for example, you did not learn the tables of the ordinary weights which were then in vogue in Germany?—Yes, we had to learn them, but there was nothing to learn in the metrical system, because it goes in the same way by tens as the ordinary counting goes.

540. Quite so; the system is very much more simple

*Chairman*—continued.

simple; but still you were taught that in your schools?—We were taught it, certainly.

541. Was that general throughout all Germany, do you think?—I think it was quite general. I am speaking, of course, of the better schools—of the Gymnasium and high schools, and so on.

542. But in the common public schools of the country do you know what was done; did they teach it to the children there?—No, they did not teach that.

543. In spite of their not having been taught the system, was there much objection on the part of the common people of Germany, the retail traders, for example, when the system became compulsory?—No, I do not think so, or rather, I know it was the opposite, because the facilities for retail trading are so much greater, and mistakes are so much more difficult to make, that everybody found it of very great advantage.

544. They very soon found the advantage, did they?—Yes, and if I may refer to something I have not mentioned, in Hanover, at one time the thaler was divided into 36 Marien groschen. That was discontinued in 1820, and a guter-groschen was introduced, of which there were 24 to the thaler, and 12 pfennig; you see that is the binary system, and the factor 3 added, so as to have as many sub-divisions without fractions as possible. Then in 1857 another groschen was made with 30 to the thaler, and 10 pfennig. When I was at school there were these three groschens continually being mixed up together, because the old people were accustomed to the Marien groschen, and other people to the others. You often hear in the market place people say, "I will give you two and a-half groschen for that"; then the market woman would answer, "Very well, give me your three groschen, and I will take it," both meaning the same coin. Then when the decimal system was introduced in 1873, all these old things vanished at once. In 1875, when I came back to Hanover, there was no one who talked about these different groschens; they were all content with the decimal system, because it was found to be so much more convenient. It was the same with regard to weights and measures, but I mention the coins because the Marien groschen survived for 53 years after it was abolished, and then, in two years, it disappeared.

545. And the same thing, you say, took place with regard to the weights and measures?—Yes.

546. Do you think your system of weights and measures was worse, or more complicated, than the English system?—No, the old system was exactly the same; it was a foot with 12 inches; we had not got the yard. The German ell was only two feet instead of three, otherwise it was exactly the same as the English system, except that the various feet of adjoining States did not agree.

547. That, of course, made the matter more complicated where you had the Rhine foot and some other foot which was a different length?—Yes.

548. Therefore, the difficulty in continuing these measures was greater, perhaps, than here, inasmuch as we have only one foot?—Yes, I quite admit that. If you had only the national relations to consider, I should not say there was any necessity for altering, but with the present frequent and increased inter-communication between different people, and the facilities with which you can get about, it is the international consideration which makes the adoption of the metrical system so desirable.

549. Do you think that in that respect the desire is overwhelming?—I certainly think so, and I may just call attention to one fact; when the Commission was originally appointed in 1861 by the old German Federation, it had the instruction to devise a national unit of weights and measures, not international but national; but the moment this Commission came to inquire into the subject, they found that it was quite hopeless to try to get a purely national measure for Germany, because they foresaw that with the ever-increasing intercourse with nations, they would be compelled to make a change again, and they thought it was better to change at once to the metrical system.

550. Are those all the remarks you have to make with regard to Germany?—Yes.

551. Will you now tell the Committee as shortly as you can what happened in Austria?—In Austria the law to introduce metrical weights and measures was passed on the 23rd July 1871, and the new weights and measures were admitted to be stamped from the 1st January 1873, and their use was made compulsory from the 1st January 1876.

552. So that three years were allowed from the time they were stamped to the time they were made compulsory?—Yes; there were two years' notice, first that they might be introduced, 1871 to 1873, and from 1873 to 1876, three years, to make the change.

553. Are there any other remarks with regard to Austria which you wish to make?—In Austria one Article of the Act said that new weights and measures might be used in trade after the 1st January 1873, if the parties concerned were agreeable to do so; and tradespeople wishing to avail themselves of this permission, had to display a notice to this effect, and had to place a table in their shop, showing the value of the old weights and measures as compared with the new system.

554. Was there anything of the sort required in Germany?—No, I think not; it was done naturally; they did it without being told.

555. But in Austria they had to display a notice?—Yes, and this yellow book gives the law, and the official comparison of the weights and measures, and also some tables to reduce them to the new system (*handing book to the Committee*).

556. Can you tell the Committee how far this was adopted without objection on the part of the people in Austria?—There was no objection whatever. They had been petitioning and agitating for it, because you see in Germany the measure became compulsory on the 1st January 1872, and the Austrians having a great commercial intercourse with Germany were very desirous of having the same weights and measures, because

*Chairman*—continued.

because everybody was convinced it was the most reasonable system.

557. Then, amongst the shopkeepers and so on, you do not think that in Austria there was any objection raised?—None whatever.

558. And there, of course, a central standard office has been established?—Yes, on the same system. The Central Commission in Vienna compare the Imperial standards with the originals, and then the various inspectors of weights and measures in the provinces have to compare their own standards from time to time with the Imperial standards kept at Vienna.

559. In Austria a great variety of measures were employed, I believe?—Yes, but not so many varieties as in Germany. The system in Austria was much more uniform.

560. Are these old measures which have existed so long both in Germany and Austria used now. We hear that in some places the old measures are still employed in England, although they are not legal. Do you know whether in Germany the old measures are still in use, although they are not legal?—No, not at all.

561. You have no example to give of that sort of thing?—None at all, because, as I said with reference to the coins, when formerly the coins were changed, they remained in use, but the moment the purely decimal system was introduced it was found so convenient that the old system had no chance against it.

562. Then in this respect, both in Germany and Austria, the history of the change is a different one, is it not, from that in France, where 40 years was needed?—Yes.

563. How do you account for that?—The conditions under which the change was made are entirely different. Inter-communication between distant parts of the same country, and still more international trade, have developed so much in this century that the advantages of common measures are brought home to the inhabitants of even the remotest districts; therefore, they are much more willing than the Frenchpeople were 100 years ago to put up with the inevitable inconvenience which the change must bring, although only for a short time, in order to secure the permanent advantages of a system of weights and measures which is based on the same system as the ordinary counting is. I also looked at the evidence of M. Lechatelier before the Commission of 1862. He pointed out, that although Louis XVI. started the idea of an international system it was eventually tinged with the reproach that it was the product of the Revolution, and everything which savoured of the Revolution was looked at with disfavour in France at the beginning of the century; therefore, people would not have anything to do with it for a long time until the Orleans family had the courage to make it compulsory.

564. Besides that, I suppose, you would also say that the system was an untried one, whereas, at the present moment, it is not an untried one, but one which has passed the ordeal of practical use?—Yes.

565. And, therefore, the adoption of a system of the kind nowadays is different?—Yes, the last 30 years have made in that respect a very great difference, because there are double the number of people using the metrical system now that were using it in 1862.

566. Do you think if the reasons then were strong for the adoption of the metrical system in England they are stronger at the present moment?—They are much stronger at the present moment.

567. I suppose many of these countries do not allow any system other than the metrical system for Custom House clearing, do they?—That is so; and only lately it was settled that no orders must be given by several foreign Governments, except in metrical measures.

568. Have you any other specimens of scales which you wish to exhibit?—Yes. I have here several English-made rules. Here, for instance, is a metre, and the inches on the other side. Here is a scale on one side of which the inch is divided into 10 parts, because it has been forced upon surveyors and engineers to use the decimal system, even in connection with the English measures. All these foot rules you will find on the edge have the foot divided into 100 parts, because you cannot do without it where you have many calculations to make. I may say also that in some insurance offices they make all their calculations by the decimals of the pound, and leave shillings and pence out.

569. Has the dual system, as proposed by the Commission of 1869, been satisfactory or otherwise?—No, I think it has complicated matters very much for manufacturers and merchants, and, as I said before, there are some manufacturers in England who refuse to work by the Imperial measure at all, and say they will only work by the metric measure.

570. Do you think that, so far as English trade is concerned, there is a considerable difference between the position of things now and what it was 50 years ago?—Certainly. At that time England was practically the manufacturing country for the world, and people if they would not take the machines made according to English measure, and so on, had to do without them; so they were forced to adopt the English measure. Besides that, 50 years ago there were not so many countries who had adopted the metric system, whereas now by far the greater part of the civilised nations have adopted the metric system, and British commerce is very seriously handicapped by having a different system from that which is in use in most parts abroad.

571. Besides which, I suppose now other countries manufacture the machines of which we were the sole manufacturers some years ago?—Quite so; it is now a question of competition, and therefore anybody who is handicapped by having a different system of weights and measures is at a serious disadvantage. France, Belgium, and Germany are making very great efforts to extend their trade, and the British manufacturer, I think, ought to be helped to compete with them.

572. Do you think the adoption of the metrical system would act in that direction?—It would be a very great help indeed.

573. Have you any other remark you would like

*Chairman*—continued.

like to make to the Committee in examination-in-chief?—No, I think not.

Sir *Samuel Montagu.*

574. How long have you been in this country?—I came first in 1867, and went away in 1868, and came back in 1871, and I have been here ever since then.

575. Knowing both nations, the German nation and the British nation, do you think there would be any greater difference in making the change in this country than there was in Germany?—If anything I should imagine that the English people, being a more practical nation, would see the advantages much quicker, and would adopt the metrical system much more willingly than was done in Germany even.

576. When the change was made in Germany, had you then different weights as we have here, such as troy, avoirdupois, and apothecaries?—No; you see the weights in Germany in 1870 had the metrical pound already, but the sub-divisions were different ones.

577. So that there was even less necessity for a change in Germany than there is in this country?—They even went so far that they would not make a change, and adopted the metrical pound which they had before as a unit; they kept it as a unit, and would not take the kilogramme; but after practical working it was found so inconvenient that it was altered, and the unit was changed into the kilogramme so as to have the pure decimal system.

578. What I meant to ask was, was the necessity of making the change in Germany about 1870 less important than the necessity of making it in England. I mean to say that in England our system is more complex than that which existed in Germany in 1870 when this change was made, is it not?—You see that, although the unit was the metrical pound, the sub-divisions were as complicated as here, having 30, and 32, and 100 parts.

Mr. *Wallace.*

579. In the case of Austria and Germany, was there any antagonism on the part of any trade that required special exemption, as in the case of the herrings and the cran in Scotland?—No, I do not think there was any trade which objected; I never heard it.

580. Do you think there could have been without your knowing?—I do not think so.

581. You said that the people of Austria, because of the intimacy of the trade between Austria and Germany, petitioned for a change; does that equally apply to the small trader for local purposes as to the wholesale merchants trading between the two countries?—I was thinking more of engineering societies. Agriculturalist societies also petitioned for the metrical system. It was a universal agitation.

582. Do you know of your own knowledge of any business actually falling through between those countries because of the different system of weights and measures?—I believe our own house lost some orders on account of not using the metrical system.

583. Can you say positively; I want to know positively, not as a matter of belief. Did business fall through, so far as you know, in any instance because of the difference?—Then I will put it positively, yes.

584. Do you remember any important instances?—No, I could look them up and give the instances.

*Chairman.*

585. Perhaps you will see if you can find them for the Committee?—Yes.

Sir *Edward Hill.*

586. Amongst the poorer class of purchasers was there any complaint at all of this change?—No. You see, these tables were all published giving the exact equivalent of the old and the new weights and measures, so that there was no difficulty in ascertaining that they really got the right measure at the right price. There was no difficulty in that, because they were all published. In Austria, for instance, the shopkeeper had to keep a table of comparisons, so that the customer could look at it and see that he got the right measure.

587. So that, as a matter of fact, no inconvenience, of a lasting character at all events, accrued?—No, not at all. It was all a matter of about a fortnight or three weeks; then the people were accustomed to it, and did not ask any more for the old measures, but asked for the new.

588. I suppose that at that period education was not so extended as it is now here in this country, was it?—I am not so sure. In Germany at that time, I think, everybody could read and write. It was very seldom that you found anybody who could not read and write, and I think you can find here still some people who cannot.

Mr. *Crombie.*

589. Do they ever speak of the old units now in Germany; do they ever speak of a pfund, for instance, among the common people?—Yes, the pfund is spoken of; but everybody knows that it is half a kilogramme, and there is no difficulty about it; but I think that is about the only old unit which is used.

Mr. *Burt.*

590. I understand you to base the case for the adoption of the metric system in this country mainly on international considerations?—Yes, certainly.

591. That it would facilitate international trade, and to that extent it would be a benefit to the producer in this country?—Yes, and I would even go so far as to say that it has almost become a necessity for international trade, and that is shown by the metrical system being adopted, for instance, at our works. But it would also save no end of clerical work in connection with the internal trade in England. Therefore, if you will not admit that the international considerations are so important, it is even important for the saving of business time.

592. I quite understand that it is a simpler, and we will say, perhaps, a more rational system; but considering the difficulty in effecting the change, do you say it is mainly because of the international considerations that you strongly advocate

Mr. *Burt*—continued.

advocate its adoption; is that putting your argument fairly?—No, I cannot admit that the change would be difficult or long, because the advantages are so very great. As one witness said before a previous Commission, if you want to learn swimming you have to go into the water, so if you want to see the advantages of the metrical system you have to adopt it; then you will see them at once. The change was very much feared in Germany; it was expected that there would be a lot of difficulties, and so forth, and they hesitated a long time; but when it was enforced there was no difficulty about it whatever.

593. Was it adopted in Germany mainly from international considerations?—Yes. As I said, the Commission was originally instructed to devise a national unit, or national units, of weights and measures; it found, on deliberating, that sooner or later universal weights and measures would be adopted throughout the civilised world, and then they looked round and saw that the English and the French measures were really the only two which could come into the question; after a very careful consideration, they considered the metric system to be the better one, because it is founded on the same system as counting, having tens as units; so for international considerations the metrical system was adopted.

594. Did I understand you aright, that it was about four years during which the transition took place. The Act was passed in 1868, and it was made absolutely compulsory in 1872, was it not?—Yes.

595. And there really was not anything that you may fairly call friction or national opposition on the part of the masses of the people?—No, not at all; in fact, as far as I recollect, the metrical system was very largely adopted between the 1st January 1870 and the 1st January 1872 during the optional period. It was very largely adopted then, and was found to work so well that when the compulsory time came there was nobody to be compelled.

Mr. *Whiteley*.

596. You say that you think it would largely assist international trade; would it assist any international trade except, in all probability, the engineering and electrical trade, and trades of that class?—You see most people trade with pound and ton, and it is a great convenience to have them on a decimal system. You would not have 112 lbs. and three quarters, and that sort of thing.

597. But as a matter of fact, say, for the cotton trade, and woollen trade, or carpet trade, or any of the great manufacturing industries of this country, how would it assist in any way, internationally speaking?—They have to compete with other countries which use the metrical system, and if they give their dimensions in the English system, and the others give them in the metrical system, most customers will say, "We cannot be bothered to reduce the English dimensions to metrical ones, and we cannot compare them, and will not consider the offer."

598. Undoubtedly, in that respect, there might be some little benefit; but have you considered



Mr. *Whiteley*—continued.

this question, that in the working of such trades as I have mentioned, where all the standard lists and the arrangements for the purpose, and all the calculations and all the weights and lengths are fixed upon our English measures, practically it would amount to such a revolution at home that it would neutralise the little benefit we might derive from abroad?—You are judging of the matter as if the inconvenience would last a long time, but it would only last for a short time. You see, you would certainly have three or four years of transition, and during that time you would have to repair your machinery; you would have to replace worn-out parts, and it would be the same thing to you to replace those parts according to the new as to the old system, and for large dimensions there is not very much difference. You would find you would not have to make many alterations.

599. Taking the cotton trade, a standard make is what is called 79 inch 37½ yards 8¼ pounds shirting, which is known all over the world wherever that shirting goes at the present time. It is known as of certain weight, length, and width; would it not in some way damage the reputation of that shirting if those figures had to be recalculated in all the markets of the world?—Certainly there is a difficulty about that; but, at the same time, if you can guarantee that nobody else in any other country will ever make that shirting, then of course you can leave it as it is; but this is the state of things which has sprung up lately: the metrical countries are competing with England in all these articles, and the consuming countries, being also metrical to a great extent, they prefer having metrical dimensions. They may go on for a long time, and I hope they will, using English shirtings, but eventually you give the Frenchman, or Belgian, or German a very good ground to oust you if they offer the wares in the measure of the country of the customer, while you stick to your own.

600. Do you think the change would be carried out more easily in England than it was in Germany in 1872?—Yes, because, as I showed you, the metrical measure is, to a great extent, adopted here. It has been taught for a good many years already in the Board Schools, and so many more foreign countries have now adopted the metrical system, that everybody is much more aware that it is a useful thing. I think nobody can deny that if all the civilised nations had one weight and one measure it would be an advantage.

601. Yes, if you had to begin and make the world afresh, no doubt; as a matter of fact, in 1872 was not Germany, as a manufacturing nation, almost insignificant, as compared with what we are at the present time?—No, I will not say insignificant.

602. Was she hardly comparable?—Of course, the manufacturing industry was much smaller.

603. In 1872, referring to Sir Edward Hill's question, was not education in Germany generally of a higher standard than it is at present in England; were not the children better educated in 1872 in Germany even than they are in this country at the present time?—I will not go quite so far as to say that, but I have mentioned already

Mr. *Whiteley*—continued.

already that there were very few people who could not read and write.

604. As a matter of fact, did not these alterations, the weights and measures in Germany, largely arise from the unification of Germany which had taken place in 1866 and 1870 after the two great wars there, and when they had to deal with a vast number of small States, each one having different weights and measures and a different coinage of its own?—I believe that is a common mistake, because you see this recommendation to introduce the metrical system dates from 1861, so that it can have nothing to do with the war of 1866 or the war of 1870. The necessity had been found long before, and the agitation had been commenced long before anybody ever thought of the possibility of having a United Germany. Of course everybody wished it, but they did not think they could get it so soon. It is just the same as the mistake about the metre being made by the revolution in France, whereas it was originally started by Louis XVI.; and just the same, the necessity for the unity of measure was found out long before Germany was united.

605. As a matter of fact, if an Englishman went to Germany in 1872, was it not most difficult for him to calculate the change he got for a sovereign. He got a vast number of all sorts of coins, and in every 100 miles he went he had to deal with a different coin, had he not?—Yes, the uniform coinage was introduced after 1873.

606. How does the German pound compare with the English pound?—It is a little less; the English sovereign is equal to about 20 marks and 40 pfenning.

Mr. *Stevenson.*

607. Was not the reason that France adopted the system a reason why Germany adopted it?—That had also some weight; but, as I said, the Commission started with the idea of creating a national measure for Germany by itself. They did not intend to copy either England or France, and it was only when they went into the circumstances of the case that they found that there were such very good reasons for adopting a system which was destined to be adopted by every nation that they went in for an international measure.

608. We were told the other day that there were as many different feet as there were different provinces in Germany; is that so?—Yes, they lasted until the metrical system was introduced; up to 1870 there were still all these different feet in use.

609. With regard to England, you are aware that there never was more than one foot in England in all its history, and in all the different counties in England, are you not?—Yes; but then, for instance, there was the same foot in all Prussia, which was nearly as large, I think, as England, or rather larger, and there was the same foot in all Austria; but, still, they found it would be of advantage to adopt the metrical system.

610. Still, the English people have only had one foot, one yard, and one pound in all their history, have they not?—Yes. If you will imitate the Chinese, and keep entirely to yourselves, of course, well and good; but if you want to do

Mr. *Stevenson*—continued.

international trade, as you always have done, then it is certainly better to adopt that which most people have adopted.

611. Starting from where we are at present, we are in this position, are we not, that we have no such necessity as compelled the Germans to revolutionise their standards?—But I say the necessity has arisen during the last 30 years, because the other countries are competing with England in a way they never did before.

612. That is upon the point of international trade?—Yes.

613. But keeping our eye at home, is there any such necessity in England, or in the English-speaking countries, for such a change as was necessary in Germany?—I should certainly think that it would be very desirable, on account of the saving of time, if this complicated system of weights and measures were abolished here in England. It would be a great saving in all commercial houses, and in all engineering businesses, and so on, and, as I have told you, surveyors and other people already use the decimal system because it saves time.

614. We have already attained to that advantage in land-surveying, both in measuring the surface and in levelling heights; heights are levelled in feet and decimals of a foot, are they not?—Yes.

615. Then, might not we adopt the decimal to any extent we pleased without absolutely changing our units?—Yes, but then you still handicap yourselves, as compared with other people, by going through all the trouble of a change, and not going thoroughly at the matter. If the English foot had been adopted all over the world, I would certainly say do not change it, even if the metre is better; but you see during the last 30 years most of the civilised countries have adopted the metre, and the question is, would it not be a very good thing to get rid of that cumbersome system, and put your people on the same footing as regards international competition, and relieve the home trade of a lot of trouble.

616. Wherein consists the trouble in the home trade?—If you have to sell 13 cwt., 3 qrs., 5 lbs. of something at so much a hundredweight, it is a long calculation before you find it out; but if you have the metrical system, you simply say, "I have 1,435 grammes at so much per thousand grammes," which you can get at readily.

617. Are not we not at liberty to drop hundredweights, quarters, and stones altogether, and express our weights in pounds, and nothing more, as they do in America?—Certainly.

618. And if this country had the common sense to drop hundredweights, quarters, and stones, and speak of pounds, it would put us in the same advantageous position as you have described under the metric system, would it not?—Not quite, because it is not quite decimal; the ton is 2,240 lbs.

619. Take America. I have here an instance of a consignment of sugar from Trinidad to New York, which has been furnished to me by a friend, and the whole account is rendered in this way: 1,350 bags of sugar, weighing 331,548 lbs., and that is calculated at so much per pound; there

Mr. *Stevenson*—continued.

there is no trace of hundredweights?—Yes, that certainly is an improvement. I will not deny that for a moment.

620. My point is this: Without altering our units we have great liberty in decimalising them, or in dropping superfluous intermediate standards, and get the advantage the Americans have got, and which is got in the United States regularly, have we not?—Yes, certainly, it would be a great advantage; you can do that with pounds, and with anything where you deal with great weights, but you cannot do it with feet so easily, it would be a great revolution if you wanted to divide the foot into a hundred or thousand parts.

621. Is it necessary, if you were buying a hundred square feet of planks, that they should be reckoned as so many feet and thousandth parts?—I am thinking more of drawings and machinery, where you want sub-division of the foot; that is the sort of thing which would be so very greatly benefited if there were the decimal division.

622. But have not we the power now, as I am told in some large factories is the case, of having all the machine drawings in inches and decimals of an inch?—Certainly, but then you are introducing in that way two or three new ways of calculating weights and measures in England.

623. But it is the same inch, is it not?—Perfectly; but you go in for decimals of an inch instead of 12 lines and 12 points.

624. It is quite lawful to do so, is it not?—I do not think so.

625. I think the Board of Trade would give you standards of decimals of an inch if you wished to have them for reducing in that way?—I do not know, but it is against the law, I think.

626. Why could not all this free scope which the decimal system gives as applied to the metre be applied to our feet and inches, and so on?—I certainly think that you can go a great way in facilitating matters, and as I have mentioned already, a good many people do that: they go in for feet and decimals of feet and do not trouble about inches. But what I mean, is the great desirability and the obvious advantage of the whole civilised world having the same measure and weight; and if you want to introduce changes, introduce this change, because it will give you no more trouble than the change you propose. It is not desirable to multiply the various ways in which you can divide the English foot.

627. Is not the English language the most extensively spoken language in the world, and most likely to become so?—Well, I do not know about the Chinese.

Sir *Samuel Montagu.*

628. Did you understand from Mr. Stevenson that there would be a great facility if the pound unit were adopted, and decimals of a pound. Did you understand from Mr. Stevenson that he would abolish the troy and the apothecaries weight at the same time, because the bullion dealers of the chemists would hardly adopt the avoirdupois system without some protest, would they. Therefore, if Mr. Stevenson's advice were taken, we should have the pound avoirdupois decimalised and yet have the other weights in confusion, or else abolish them. Did you so understand in admitting that there might be an advantage in making that change?—I understood from Mr. Stevenson that he was going to use decimal multiples of the pound; I mean for large weights he would use pounds only, the pound as a unit.

629. Which pound?—The avoirdupois pound; but he did not say anything about the sub-division.

630. Nor about the apothecaries and troy weights, did he?—He said nothing about those.

Mr. *Stevenson.*

631. Do I understand you to say that the people in Germany do not use dozens in selling things?—Certainly the word "dozen" is used, but I think they sell eggs now by tens.

632. Does it not come to this very much, that the great urgency is for the sake of facilitating foreign trade that you recommend the metric system to us in England?—I certainly think that the greatest argument is on account of the foreign trade, but you must not forget the great saving in time in all transactions both at home and abroad.

633. I think you admit, do you not, that if we got rid of hundredweights, quarters, and stones, there might be a considerable saving of time without altering our units?—Certainly it is a step in the right direction.

634. Mr. Dowson laid before us a number of extracts from British Consular Reports showing that we in England lost trade with foreign countries which adopted the metric system because foreigners would not use our standards. Is not that the fault of the manufacturers and merchants, who do not condescend to accommodate themselves to the knowledge in the minds of other people whom they wish to deal with?—I think I have explained already with regard to our own works that if you have a double standard like that it implies in a good many cases double patterns, and double gauges, and double dies, and that sort of thing, so that a good many people in the keen competition which exists now cannot afford to have the double set; they make their offer in the English measure on the chance that it is accepted, and cannot afford to make the double set.

Mr. *Whiteley.*

635. Is there any trade which has shown such development lately as the engineering and machinery trade in which your metric system would be of the greatest advantage?—I do not know that they have developed particularly quickly for export purposes.

636. Have you not seen the Board of Trade Returns upon that?—No, I have not.

Mr. *Stevenson.*

637. Then does not it come to this, that, for the saving of inconvenience perhaps in the trades of those dealing with foreign countries, you would revolutionise all our standards and all our ideas of weight and dimensions?—It is not such a great

Mr. *Stevenson*—continued.

great revolution; it is a very easy change, and quickly effected. It is making a bugbear of it to talk about it as if it was something very difficult. If it were a change from the metric system to the English, it would be quite another matter, but changing to a decimal system, which has the same way of counting as you count your ordinary numbers, facilitates everything so much that the moment people begin to use it, they cannot understand why they have not adopted it for ages.

Mr. *Godson.*

638. If Mr. Stevenson's suggestion were carried out, would it not be inconvenient to bring into use that which the German Commission found could not be done, namely, a national standard and an international standard as well?—Yes, it would be very inconvenient; it would be extremely inconvenient, and would entail double expense on manufacturers.

639. Do you know anything of the tin-plate trade at all?—A little.

640. Do you know that they are obliged to use two different thicknesses for rolling, one for the foreign market and for England and America?—Yes.

641. I see, from the school-books you have put before us, that you have looked into the question from the educational side. From your knowledge of what takes place in German schools, would not there be an enormous saving in scholastic life in England if we adopted this system?—I am afraid I have no orthodox opinion on that point. You see here, these German calculating books contain a lot of examples of English measures and so forth, because for educational purposes I think the English system is much better than the metric.

642. I am not talking about education so much; I mean for practical purposes?—For practical purposes, of course, it is a frightful waste of time.

Mr. *Gibbs.*

643. You say it is better for educational purposes, but are there not many other branches of mathematics in which you wish to educate a child; I mean you might almost take the child on to trigonometry while you are teaching him our system of weights and measures. In the time you would save in the metric system, could you not take him somewhere on to algebra, at any rate?—In the metric system, as I have said already, there is nothing to teach. As I showed you in these German school books, there is a note at the end for the little children, "Remember a hectolitre is 100 litres," and so on. That is all they have to learn; then they know the system.

644. Do you think, foreign nations being so accustomed to our system of weights and measures, that it would be a convenience to them?—I quite agree that it has been the case for a long time, but I advocate the metrical system because I say that in our dealings with foreign countries we are more and more pressed by the foreign nations who use the metrical system, and by the customers also using the metrical system. That is one of the altering conditions, if I may say so. We are in a state of transition now, and it is a good time now to change, because it is

Mr. *Gibbs*—continued.

not too late yet. When you have once established a habit in the Argentine and the Brazils of buying from Germany, you will have more difficulty in winning the trade back. If you accommodated yourself to their weights and measures now, and sold according to the metric system, it would not be so difficult as if you made the change later on.

645. Do you mean to say that they are not so accustomed to our system of weights and measures?—They have been accustomed to it up to now, but they are changing because they have changed their system of measures, and of course it is more convenient to them to buy and sell in the same measure.

646. Do you mean to say, then, that if we do not follow now we shall be left behind?—That is my opinion.

Sir *Samuel Montagu.*

647. There is one important omission in your examples with regard to Germany; it is thought in this country that the greatest obstacle in the way of making a change will be on the part of shopkeepers; you have not told the Committee whether in Germany the small shopkeepers were inconvenienced, or made any protest, with regard to changing their habits of selling. Purchasers, you said, found no difficulty; but you have not stated precisely, from the shopkeeper's point of view, whether there was much objection raised to changing from the old weights to the metrical system?—No, there was not. I think I have mentioned already that during the period of transition they had ample time to prepare themselves, and they found so much convenience in the decimal way of reckoning things that they did not mind the change at all.

Mr. *Wrightson.*

648. Supposing a buyer of machinery were to ask the prices in England for machinery, and specify the requirements of that machinery metrically entirely, would he get less tenders if the dimensions and other particulars were given metrically than he would get if they were given according to the English standard?—I think, even at the present time, he would get less tenders if he specified according to the metric system.

649. Then supposing that same buyer got, say half-a-dozen tenders from different parts of the world for this machinery, and one of them from an English firm, would not there be a tendency on the part of the buyer settling that contract to say, "Well, I will not be bothered with comparing this man's tender with all these other metrical tenders; I will take the five tenders I have as being sufficient competition, and give the work to one of those, without troubling to go through all this mass of figures, and compare the different tenders"?—Yes, that constantly happens.

650. Then in that way British industry would be placed at a disadvantage if it remains long in the exceptional position it does, would it?—Yes, certainly.

Mr. *Crombie.*

651. I understood you to say that when the kilogramme was introduced into Germany the unit was the Customs pound, was it not?—Yes.

652. That

Mr. *Crombie*—continued.

652. That had been in operation 30 years?—It had been compulsory a little over 10 years, but it had been in use for 30 years.

653. Did not you say that the Customs pound was an even multiple of the kilogramme?—It is half a kilogramme.

654. Therefore the transition, so far as units go, would be easier in Germany than in England, would it not?—As far as a unit weight was concerned, it was certainly easier, and it was made still easier by their not adopting the kilogramme, but the pound, as the unit; but afterwards, in 1877, they were compelled to change that, and make the kilogramme the unit.

655. But still that kilogramme was a multiple, or an even fraction, was it not?—Yes, certainly; but the subdivisions of the pound were not metrical before 1872.

*Chairman.*

656. Would you propose to keep our English name of pound, supposing we made it equal to the 500 grammes. Would you call it a pound, or a new pound, or what would you call it?—I would call it half a kilogramme. You see, that experiment has been made, as I said just now. In Germany they had a stronger reason, because it was the unit, to keep it; but it was found so inconvenient that it was abolished. Therefore I am perfectly certain that people should learn by the experience of other countries, and not try to introduce English names, not try to introduce halves, quarters, and eighths, but simply go for the decimal system.

657. Your motto, then, in this respect, would be thorough, would it?—Certainly.

658. Is there any other evidence you wish to give?—No, I think not.

General RICHARD STRACHEY, F.R.S., called in; and Examined.

*Chairman.*

659. YOU, I think, had a great deal of experience on the question of the introduction of weights and measures in India some years ago?—I should say it was rather an attempt to introduce the system than the introduction of it.

660. You have also had, I think, great experience of the whole question of accurate measurements?—Yes.

661. You are Chairman, I think, of the Kew Committee; you are a Fellow of the Royal Society and the Royal Geographical Society, and have devoted considerable attention to these matters?—Yes.

662. Will you give the Committee a short sketch of the history of the attempt to introduce a system of weights and measures into India. During what years was it, to begin with?—The inquiry with which I was connected took place between the years 1865 and 1871.

663. Can you tell the Committee how the question then arose?—It had been notorious from a very distant past that the weights and measures of India were in a complete state of chaos. You must remember that India, although it is commonly talked of as a country, is, in reality, a number of countries occupying a portion of the earth's surface about as large as Europe, with populations differing as much as the populations of Europe do one from another, and therefore, when one talks of attempting to organise a system of weights and measures for a population of that sort it is undertaking a very big thing. It was perfectly obvious from the outset that it would be an operation of great difficulty, and must take a great deal of time. The first step that was made in the direction of getting anything in the shape of a unit of weight was in the year 1833. The currency was reformed in 1830, and Mr. Prinsep, who was the Master of the Mint at that time, and reformed the currency, proposed to adopt a standard weight, based, as all the old Indian weights were, on the weight of the new rupee, which was fixed at 180 grains.

664. Do I understand that 80 rupees was taken as new unit of weight?—That is so.

*Chairman*—continued.

665. Will you give us the actual number of rupees equal to the pound troy?—Forty seers go to a maund, and the maund therefore was equal to 100 lbs. troy.

666. Was the insufficiency of this method generally recognised?—It was; in fact, you may say that there was no recognised weight anywhere in India; and I may add that there is no recognised or authorised legal weight in India at the present time.

667. Do you mean that the pound, either troy or avoirdupois, is not a legal weight throughout India?—No, there is no such word known as a pound, except to English shopkeepers. The ordinary weight of the people is called a seer, and the usual higher denomination is a maund.

668. Then in India, at the present moment, the whole condition of things is chaos, is it?—Certainly.

669. Will you tell us what attempts have been made beyond the one you have referred to?—After several more or less futile attempts had been made to deal with the subject, the Secretary of State for India, in 1864, invited the attention of the Government of India to the subject, and about that time also there was some agitation got up in England on the subject, in which the British Association took an active part, and made inquiries of the Secretary of State to see whether anything could be done in the way of unifying or improving the weights and measures of India.

670. You mean the British Association for the Advancement of Science, do you not?—Yes.

671. They invited the attention of the Government of India, as I understand, to the importance of the subject, and requested that Government to consider what could be done. What was done?—They caused inquiries to be made all over India; these inquiries occupied about two years, and at the end of that time they formed a representative Committee in 1867, composed of members drawn from all parts of India, to consider and report upon the data that had been got together.

*Chairman*—continued.

672. You, I believe, were appointed the president of that Committee?—I was.

673. What did you do in order to assist the Committee in their labours?—In order to assist the Committee, the greater number of whom, I may say, without wishing to cast any reflection upon them, were not acquainted with the subject, and had not studied the matter of weights and measures, which is really a difficult one to deal with, I drew up a memorandum which contained an abstract of the available data obtained from the reports that had been received, with suggestions as to the best way of dealing with the matter according to my own point of view.

674. Can you hand in a copy of that paper?—Yes, I have here a printed copy of it (*the same was handed in*). I should say it is rather long, and is necessarily filled with many technical details.

675. Will you give the Committee a general view of what you did recommend, and what your suggestions were in regard to the matter?—The general result of the conclusions at which I arrived was to satisfy me that the best course to adopt would be to accept the metrical system in its entirety.

676. That was in the year 1867, was it?—That was in the year 1867.

677. Before Germany had adopted it?—Yes, certainly. My reason for this conclusion was that the evidence went to show that the ordinary weight for retail business in India called the seer differed very little from the kilogramme. That applied more particularly to all Northern India. In other parts of India the weights were not so uniform; but still on the whole, taking the whole set of Indian weights, a seer of two and two-tenths of a pound English avoirdupois really approximates very reasonably to the ordinary Indian weight.

678. Therefore, you thought that the kilogramme might be adopted without any great difficulty, did you not?—Yes. I should, however, add, that although I say the kilogramme was nearest to the ordinary seer, the fact is that the seer differed greatly in different parts of India. Every district, so to speak, had its own seer; there was no standard, and the customary weight adopted, so to speak, settled itself.

679. Is that true as to the present day?—Quite; it holds now. There is no law at all that regulates the weight of a seer. For instance, if any man contracted to deliver so many seers or so many maunds, he could not say, "This is the seer I meant, or that is the seer I meant;" he would have to trust to the evidence of what was the ordinary meaning of a seer in the particular district. To illustrate the sort of fluidity of ideas of the people of India on the subject of weights, I may repeat what was told me by a civil officer as having occurred in the district in which he was magistrate. You may go to a mart where the people are buying and selling. The seller sits on the ground with his scales and weights, and someone comes to him, and says, "I want a seer of butter," or of whatever it may be. He weighs it out, and the purchaser says, "Oh, dear, no, that will not do, I cannot accept that; you must give me a better seer than that." Then the seller puts his hand behind him, and pulls out another seer, but the customer says "That is better, but it is not enough." So that instead of varying his price, he varies his weight. That is a *bonâ fide* illustration of the ideas which prevail there on this subject.

680. And that is true of the present time, is it?—Yes, in the least civilised parts. Therefore, as there was this very great diversity in the weights, even in contiguous parts of India, it was perfectly obvious that if you attempted to introduce anything in the shape of uniformity, virtually the weight you adopted would differ from the whole of the old weights, and, therefore, while you were about it, you might just as well select what I should call a rational and consistent measure of weight, rather than one which had no consistency, and which was based upon fancy. My conviction was, and is, that the metrical system, as a whole, supplies far the best system of weights and measures that has been yet devised; also I am perfectly satisfied in my own mind that there is no such thing as an abstract propriety in adopting one weight or measure rather than another. You must depend upon a material standard; I think all experience shows that.

681. You proposed, then, in this Report of yours, that the kilogramme should be adopted as the unit of weight, did you?—Yes.

682. What did you do with regard to a standard of length; does the same chaos exist in India with regard to measures of length as you have described with regard to measures of weight?—Quite the same, in its own way. I should say it is possible you might say even more. In a little-civilised country like India, precision in length is required much less in ordinary business than in measures of weight. I do not know to what extent the experience of India is parallel to that in other countries, but it was notorious there that almost every trade had a different standard of length. The man who sold cloth sold by a different measure to the man who sold calicoes; also the man who sold had a different measure to the man who bought.

683. To overcome this chaos, what did you propose?—I proposed to the Committee that was appointed to advise the Government the adoption, pure and simple, of the metrical system, as a basis on which to work. Of course it was quite recognised that it would be a difficult matter, and that it would take a long time; that you must begin by adopting intermediate and subsidiary weights and measures to ease the movement off.

684. You mean, that it should not be made compulsory at once, but that it should be made optional for a certain length of time, and afterwards should become compulsory?—Quite so. The way that commended itself to myself, and I may say that the Government eventually accepted it, was to introduce, first of all, the weights and the measures through the railways. The railways were, at that time, beginning to spread gradually over the country, uniformity of weight was

*Chairman*—continued.

was absolutely necessary for them, and, so to speak, the railways had the command of the situation, as they could control absolutely the weights which they recognised. It was then proposed that the weights should be introduced through the railways. I may say that a first step in this direction was actually taken, and the weights and the weighing-machines on several of the railways were provided on the metrical system, but then the thing came to an end.

685. What was the result of your recommendation?—The Committee objected to it entirely, and they propounded a bastard scheme based upon the English pound and foot, which was not the English system, but was partly arranged with decimal subdivisions and partly subdivisions in sixteenths, which was a jumble, and which would have been as bad as the English scheme, which is bad enough, or even worse.

686. Did they carry out this suggestion which you call a bastard system?—No, the plan was referred to the Government, and the Government declined to have anything to say to it. I should add that, as I considered their Report was entirely inefficient and objectionable, it was proper for me to enlighten the Government so far as I could, and I wrote my opinion on the Report, which is put in the form of a dissent from the Report of the Committee. In that will be found, if you care to see it, the grounds that I had for objecting to this, what I call bastard system, which they had proposed.

687. Were there any of the Members of the Committee who joined with you in that dissent?—There were two gentlemen (and I considered they were the Members of the Committee best capable of forming an opinion on the subject), Colonel Hyde, the Master of the Mint, who was the official custodian of the weights and measures used for the Mint, and Mr. Harrison, the Accountant-General to the Government of India, who was also a man conversant with subjects of that sort.

688. Do you think that these gentlemen were the Members of the Committee, with yourself, who really knew more about it than the rest?—I think so, certainly. I may say that one Member of the Committee (to show the sort of knowledge they had of the general subject), who was a native of the State of Jaipore, in Rajputána, said he had never heard of the metrical system, but that he had heard of the pound; that was the extent of his knowledge. Several of the native members admitted that they had just heard of the metrical system, and that was all.

689. I suppose the objections or the statements which you made were of a technical character. Do you think it worth while to give your reasons. You have already stated that you think the metrical system is the best. Have you anything more to say upon that?—It would be going into a long story, and I do not suppose the Committee would care to hear my reasons for thinking why it is the best, or why a good many of the proposals which have been made on this subject are quite illusory. There is one which I might refer to, a most extraordinary one, made by a very eminent person, Sir John Herschel, and it is quite inconceivable to me how he ever could have made it. You may remember the proposals yourself. It was to take the English inch as the standard, and the reason he proposed to take the English inch as the standard was a most eccentric one, as it appears to me. This is what he says, "The length of the axis of the earth" (the polar axis, I think) "according to the best determination, is 500,493,552 English inches"; and, therefore, if you make the inch your unit, 500,000,000 of these units will be for practical purposes equal to the length of the earth's axis, and it will be the best you can take. That is an illustration of the sort of way in which wise men make proposals about these things.

*Chairman*—continued.

690. What followed on the submission of this Report of the Committee?—The Government of India, having carefully gone into the subject, after reading these various Reports, came to the conclusion to support the view that I had taken, and they unanimously accepted the proposal to adopt the metrical units for India.

691. Can you name the chief Members of that Government?—I should wish rather to lay stress upon their names. The Governor-General at that time was Lord Lawrence, and the Members of Council who participated in its acceptance were Lord Sandhurst (who at that time was Sir William Mansfield), Sir Henry Mayne, Sir Richard Temple, Sir John Strachey, and Sir Henry Norman, all of whom, I think, will commend themselves to the Committee as being persons whose opinions would carry great weight with them in connection with anything relating to India. Of all of these I would lay particular stress upon Lord Lawrence. Lord Lawrence is the only Governor-General in recent times who has ever had personal Indian experience in detail, and he was a man perfectly well known for his special knowledge, and the care he would take in not interfering in any of the affairs of the people of India likely to lead to mischief. He was a man of great caution, and he had a thorough knowledge of the people with whom we had to deal.

692. You think if Lord Lawrence agreed that the adoption of it was desirable, it was very strong evidence in favour of that adoption, do you?—Yes, I think so.

693. Did they obtain the authority of the Secretary of State for India?—On that representation the Secretary of State, who was at that time the Duke of Argyll, agreed to the adoption of the kilogramme as the unit of weight. His authority, as it was afterwards explained, was limited to the introduction of a uniform weight. Nothing was said about measures originally.

694. Did you introduce into the Legislative Council a Bill?—A Bill was introduced by me, and it became law at the commencement of 1870.

695. Who then was the Governor-General?—Lord Mayo; it was just after Lord Lawrence had left.

696. This became law in 1870, did it?—At the beginning of 1870. The Act, according to the usual process, was sent to the Secretary of State, and he objected to it on account of, as I said before, its having included measures of length as well as of weight. He also considered that it had in it elements for the compulsory adoption both of the weights and measures, which he

*Chairman*—continued.

he thought it was dangerous to entrust to the Government of India.

697. Did this Act receive the approval of the Secretary of State?—After the objections taken by the Secretary of State, and in consequence of them, the old Act was disallowed, and a new Act was passed at the commencement of 1871, which referred only to weights, in which authority was given to the Government of India to require Government offices, municipal bodies, and railway companies to make use of the new weight. There were no penalties, excepting for the fraudulent imitation of verifition stamps. That was passed, and that is the law to this day.

698. But, as you have explained to us already, it is, in fact, a dead letter, is it not?—Lord Mayo, most unfortunately, a few months after that Act was passed, was murdered, and his successor declined to take any further steps in the matter, and no further steps have been taken since.

699. But still this Act of 1871 is on the Statute Book, is it?—It is; and, of course, it can be enforced to-morrow if the Government choose to do it.

700. Has anything been done since in the direction of giving effect to the Act of 1871, or otherwise providing for the object it had in view?—No, nothing at all, so far as I know; there have been one or two feeble attempts made to raise the subject, but they have never come to anything.

701. Can you tell us what the last of those was?—There was one two or three years ago, which ended in the Secretary of State writing to the Government of India, and the Government of India giving the usual official reply that they would make inquiries.

702. Has anything come of it?—Nothing has come of it. Many people are attached to the adoption of the English pound, and there was a fresh scheme put forward about three or four years ago, something analogous to that of the Committee, for adopting the English pound as a unit—not adopting the details of the English weights at all, but an artificial system based upon it, which would have been just as inconvenient as the English system.

703. Do you think that the adoption of the metre for the railways in some parts of India had any connection with the movement which took place in 1870, of which you have been speaking?—The metre gauge for railways was adopted at the commencement of Lord Mayo's time. He was very anxious, as many people have been for a long time past, to see railways extended in India, and he came to the conclusion that it was absolutely essential that they should be made cheaper than had been the practice with the original old five feet six gauge. He caused inquiry to be made, and I was one of the persons who was deputed, with Sir John Fowler and two or three others, to make inquiry in Europe with regard to the existing narrow gauge railways; and the conclusion we unanimously came to was that a railway of a smaller gauge, something between 3 feet and 3 feet 6, would be perfectly suitable for parts of the country where the traffic was comparatively small and not likely to become

*Chairman*—continued.

heavy, and as the metre had been adopted in the Act of 1870, Lord Mayo considered that the most convenient dimension to take, as it was only a matter of an inch or two one way or the other, would be the metre, and the metre therefore was adopted. A considerable amount of construction on the metre gauge commenced then, and it has gone on to this day.

704. How many miles of metre gauge railway exist now in India, do you think?—I should think there are 8,000 miles at least. I, at the present moment, am chairman of a company that is making 750 miles. The whole of the railways in Burmah are metre gauge, and as a matter of fact, therefore, you have got a material, indestructible metre standard spread all over India.

705. Do you think that that would help the solution of the question which you have at heart?—It will, at all events, supply direct evidence of what a metre is. The metre is there; you will not get rid of it, at all events, whether you make use of it as a general measure of length or not.

706. Supposing the metrical system were adopted in England, would that facilitate the adoption of the system which you think it is desirable to adopt in India?—I think there is no question about it. Every one must guess, from what I have said, that the real reason the system is not in force in India at the present time is the obstruction of English people.

707. Then, in both ways it would act, in your opinion, satisfactorily, would it?—According to my point of view, certainly.

708. Can you tell us anything more about the proposal to adopt the metre. The kilogramme, as I understand, now is a legal weight in India?—It is.

709. But the metre is not a legal measure of length, is it?—No. The ordinary Indian system of measurement is this: the "guz" is approximately equal to a yard, it is divided into two hâths, or cubits, with further subdivisions. The metre is just as good an approximation to a yard as the average guz.

710. Have you any other remarks you desire to bring before the Committee?—No, I do not think there is anything. I might say, in connection with this matter, that in 1870, shortly after the Act of that year was passed, I came to England, and Mr. Chisholm, the Warden of the Standards, was good enough to go into the whole subject of what you might call the material appliances which would be necessary for the introduction of the metrical weights and measures into India, and he and I together drew out a Report which was presented to the Secretary of State. That was in September 1870. The Report goes very fully into the matter of the weights that should be required, and how much they would cost.

711. Is that Report in the possession of the House?—I think it is. I think it was printed as an appendix to one of the Reports of the Standards Commission.

Mr. *Stevenson.*

712. What is the standard measure of length prevailing in India now?—There is none.

713. Is

Mr. *Stevenson*—continued.

713. Is it not the standard yard?—There is no standard. Of course, the Government for its own purposes, for the purposes of the survey, and so forth, would use the English foot or yard, as the case may be; but there is no such thing as a standard there.

714. Did Lord Cross, when he was Secretary of State, not decree that the English yard was the standard measure of length in India?—No; as far as my recollection goes, there was nothing of the kind. I was at the India Office a good part of Lord Cross' time, but nothing of the kind occurred during that time.

715. Are the Indian railways marked off in miles along the lines by milestones and mileposts?—Yes.

716. Are the statistics of Indian railways rendered in tons?—Tons and maunds. The maund that is in use on the Indian railways is the maund of which I have spoken, of which 27⅔ths goes to the ton. All the rates on Indian railways are fixed per maund per mile. The ton of Indian railway statistics in an approximate quantity only, being reckoned at 27 maunds to the ton instead of the exact proportion. Of course, so far as the railways are concerned, there is not the smallest difficulty in converting rates to any standard of weight or distance. You can just as easily fix a rate at so much a kilometre, or so much per 100 kilometres, as at so much a mile. In the same way it is just as easy to fix your charges for goods on the kilogramme as it is on the maund; there is no practical difficulty in that. I have satisfied myself that, even supposing you were to take the present rates on the railway of which I am the chairman, the East Indian Railway, the change could be made without the smallest difficulty, adopting the metrical weights and measures; I mean that adopting even hundreds and thousands of metres or kilogrammes, it could be done without materially altering the effective charge, with perfect convenience.

717. Are the indicators on the steam pressure gauges on the locomotives expressed in pounds pressure per square inch?—Yes; but of course a locomotive engineer would be just as well satisfied with the metrical division as the inch. There are none of the mechanics whom we have, I am sure, on our railway who would not just as readily, or more readily, make use of the metrical scale as they would of the inch and foot. I do not see that any question can arise as to that at all.

718. You gave us an illustration of the Indian natural measurements, which would seem to be what might be called a cubit?—Yes, two cubits to the yard.

719. Have they anything approaching a foot in their language?—No, not among the natives. The anglicised native speaks of a foot, and takes a foot according to the carpenters' measure.

Sir *Edward Hill.*

720. I take it to be your opinion that the introduction of the metric system would be of advantage to India?—There is no question of it at all, inasmuch as any introduction of any system would be good; and if you are going to introduce a system, then, I say, introduce the metrical system, as being the best.

Sir *Edward Hill*—continued.

721. I gather that you do not anticipate that there will be any great or insuperable difficulty in introducing it?—Great difficulty there probably would be, but insuperable, certainly not. It would take time.

722. Do you think the natives would eventually get to understand the new measurement?—Perfectly. If, as would necessarily be the case, the whole of the railway transactions instead of being conducted in maunds, were conducted in aliquot parts or multiples of the kilogramme, they would very very rapidly learn it. They are intelligent people, and would rapidly see what the relation was; and it is just as easy to calculate it in one way as another.

Mr. *Wrightson.*

723. I suppose the extension of railways in India will gradually force on the necessity of making all these weights and measures the same, will it not, apart from the metric system?—On the railways we do enforce it, so to speak. We compel everybody to adopt one particular weight. As I said, if we had been authorised in 1870 to adopt the kilogramme, it would have been adopted without a question being put by anybody, and it would have been in force at the present moment. There is the machinery, so to speak, at once to hand for introducing the kilogramme.

Sir *Samuel Montagu.*

724. Can you tell us why it was not introduced, and who stopped the introduction into India of this metrical system?—All that I can say on the subject is that the law having been passed when Lord Mayo was Governor General, his successor, I presume, viewed metrical weights and measures in a different way from what Lord Mayo did, and the Governor General of India, who is a powerful person, prevented anything being done.

*Chairman.*

725. Has no Governor General taken up the cudgels since?—No.

Sir *Samuel Montagu.*

726. Are you aware that in France and Portugal they have a metrical system?—Yes.

727. In the small parts of India that France and Portugal possess has the metrical system been introduced?—At Pondicherry, I rather think they do use the metrical system, that is to say, amongst the French dealers.

728. And the Portuguese?—I do not know about the Portuguese.

729. Could you ascertain for us that information, and send it to the Chairman?—Yes, I should think it could be found out.

730. The Committee would like to know whether in any part of India the metrical system has been introduced, and with what result?—I could find out; no doubt some of the Calcutta or Bombay merchants would know.

*Chairman.*

731. In the Native States have any of the very well educated Native princes thought of introducing the metric system?—Not that I am aware of.

 732. There

*Chairman*—continued.

732. There would be no difficulty, would there; some of these gentlemen are go-ahead people, are they not?—Yes; some of them.

733. There would not be a general objection raised then, perhaps, even in the Native States?—I cannot conceive that there should be. All these things would, of course, take time and patience.

Mr. *Godson.*

734. The alteration would not affect, I suppose, any religious scruples in any way, would it?—

Mr. *Godson*—continued.

Not in the slightest degree. The only way in which the measure of length really comes into practical operation is as regards land measure, but in land measure, although the English records are kept in acres, the local measurement is all in what is called the beegah, which varies greatly; in some parts of India it is as much as two acres, in others as little as a quarter of an acre. In Southern India land measure is based on the area that a given quantity of grain will sow, varying even according as the land is irrigated or not.

*Tuesday*, 19*th March* 1895.

MEMBERS PRESENT:

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|---|---|
| Sir John Barran. | Sir Samuel Montagu. |
| Mr. Burt. | Sir Henry Roscoe. |
| Mr. Crombie. | Mr. James Stevenson. |
| Mr. Alban Gibbs. | Mr. Webster. |
| Mr. Godson. | Mr. Whiteley. |
| Sir Edward Hill. | Mr. Wrightson. |

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. ALFRED SPENCER called in; and Examined.

*Chairman.*

735. YOU are, I believe, the chief officer of the Public Control Department of the London County Council?—I am.

736. And have paid some attention to the question within the purview of the Committee, that of weights and measures?—Yes, weights and measures comes within the scope of my department.

737. Is the question of the control of weights and measures in London under the County Council as distinguished from the rest of the country?—It is under the control of the County Council, and in the rest of the country it is under the control of the County Councils of various counties except in boroughs, where it is under the control of the corporation.

738. I wish to know whether in London you are under the control of the Standards Department of the Board of Trade, as regards the inspection and correction of weights?—No, the local authorities, both in London and elsewhere, are quite independent of the Board of Trade.

739. Are the inspectors not Board of Trade officials?—No, they are inspectors appointed by the local authorities.

740. In what way does the Board of Trade exert its influence on the question?—The Board of Trade has the custody of the Imperial Standards, and the Board of Trade verifies, from time to time, the local standards that are used by the local authorities. The Board of Trade also, under Section 11 of the Act of 1889, examines all inspectors that have been appointed by the local authorities in order to satisfy itself, by actual examination, whether or not those officers are competent to fulfil the duties; that is to say, whether they are well educated men, having sufficient technical knowledge to carry out the work properly.

741. Then they control, to some extent, the appointment of those officers, do they?—Not at all. Any man who is appointed by the local authority and who has the certificate of the Board of Trade is eligible to act.

*Chairman*—continued.

742. But he must have the certificate of the Board of Trade, must he not?—He must have the certificate of the Board of Trade.

743. Do you in London send returns to the Board of Trade as to the number, and so forth, of weights which are altered, or inspected, or modified?—I send to the Board of Trade a copy of my annual report, to the Council, and that gives statistics as to weights and measures in London.

744. Then under your Department, I understand, the Weights and Measures Acts are carried out in London?—That is so.

745, Will you describe more particularly in what way this is done?—There is a staff to carry out the Weights and Measures Act in London, of 77 men. There are 13 inspectors, who each have districts and assistants. There are other verification inspectors, and there are various coal officers, and a general staff, numbering, as I say, altogether 77 men. London is divided into 13 districts, and to each district an inspector is appointed, whose duty it is to visit all the premises in such district upon which weights and measures are used in trade, and to satisfy himself that those weights and measures are just, and are Imperial weights and measures, and are in other respects in accordance with the Act, that is to say, they must be stamped, and they must be true and just within the limits laid down.

746. Where is this alteration of the weights and measures carried on; have you a special office for rectifying the weights?—All new weights and measures, before they can be brought into use for trade, have to be submitted at one of the Council's offices in London, or at some other proper office, where they are examined by an inspector of weights and measures, and if just, they are then stamped. Having been stamped, they can be used for trade in any part of the United Kingdom.

Sir *John Barran.*

747. That is the general law of the country, is it not?—That is the general law of the country, and in London we have six such offices.

*Chairman.*

748. With questions of general law, of course the Committee have not specially to deal. Can you tell the Committee the number of premises upon which the weights and measures are used in trade in London?—Yes, there are altogether about 55,000 premises in London upon which weights and measures are used in trade. Of these, just under 3,000 are manufacturing premises, wharves, warehouses, and other wholesale premises, and the remaining number, about 52,000, are retail shops, where retail trade is carried on. Then forming part of these, there are about 6,000 premises where lever weighing machines are in use. I have particularly addressed myself to that, because lever weighing machines would have to be altered with any alteration in the system; ordinary weighing machines are even balance machines and would not be affected by such change; but where lever weighing machines were in use alteration would have to be effected, and the alteration would doubtless be an expensive one.

749. How many of your weights and measures are annually submitted to verification and stamping?—Before I answer that question, may I deal with the actual number of weights and measures in use for trade. The approximate number of weights and measures in use for trade in London, that is, excepting the City of London, is, roughly speaking, 1,280,000. I do not know whether the Committee would like me to indicate in what way that number is made up.

Mr. *Stevenson.*

750. What kinds of weights are they; avoirdupois weights, and so on. Can you give us the numbers of large and small weights?—I am afraid I cannot do that. I can tell you the different kinds. Of avoirdupois weights there are 565,000; of apothecaries weights, 30,000; of troy and bullion, 32,000. Of measures, there are publicans glass measures, 300,000; metal and wood, 313,000; apothecaries glass measures, nearly 11,000; churns and pails in use in the milk trade, 8,600; and measures of length between 17,000 and 18,000. Then as to the number of weighing machines on which the weight is indicated, such as lever machines and spring balances, we find there are about 11,500 in use in London.

*Chairman.*

751. Have you anything to say about the number stamped and verified?—The number submitted for stamping and verification last year in London was of avoirdupois weights, 258,105; of apothecaries weights, 11,587; of troy and bullion weights, 3,052; of publicans glass measures, nearly 900,000; of metal and wood measures, 117,317; apothecaries glass, 15,272; churns and pails, 660; and measures of length over 2,000; making a total of just under 1,300,000, of which about 300,000 were rejected as unjust.

Sir *John Barran.*

752. When you say measures of length, what does that include?—That includes all measures of length, such as yards, feet, and so on.

*Chairman.*

753. Can you give any information to the Committee bearing upon the difficulties which might take place in any change of the system, especially so far as the retail trade is concerned?—Yes, I have conferred with the London inspectors on this point, and we have made some inquiries, and prepared an estimate of the practical cost it would be to carry out an alteration of the system. I do not know whether you would like me to deal with some of the leading trades, to give an indication to the Committee of what the change would involve, and the cost to each trade.

754. Does that cost mean the new weights, or alteration of the existing weights?—It means new weights. We do not think, considering that all weights are denominated, it would be cheaper, and it certainly would not be so convenient, to attempt to convert the existing weights; we think it would be better to bring in fresh weights.

755. What are the weights which you are proposing to adopt in place of the present ones?—We are not suggesting the adoption of any weights; we are taking the cost of the existing weights simply.

756. Do you mean that the cost of the new weights would be similar, or nearly the same, as the cost of altering the old weights?—I think we may assume that that will be nearly so.

757. Then are you going to give us the value of the present weights in different trades?—Yes. A retail butcher usually uses, we find, 12 weights, at a cost of 1*l.* 7*s.* 2*d.* A baker uses 11·7 weights, at an estimated cost of 19*s.* 9*d.* A chemist 25·6 weights and 7·2 measures, at a cost of 1*l.* 3*s.* 10*d.*

758. They would be troy weights, I presume?—In his case they would be apothecaries weights. A confectioner uses 9·2 weights and ·2 measures, at a cost of 7*s.* A dairyman uses 7·3 weights and 5·2 measures, at a cost of 16*s.* 7*d.* A fishmonger uses 8 weights and 2·3 measures, at a cost of 13*s.* 4*d.* A grocer uses 19·1 weights and ·8 measures, at a cost of 1*l.* 12*s.* 7*d.* A greengrocer uses 14·7 weights and 3·3 measures, at a cost of 1*l.* 4*s.* 3*d.* A publican uses 81·8 measures, at a cost of 7*l.* 18*s.* 8*d.* A provision merchant uses 19·5 weights and ·1 measures, at a cost of 1*l.* 19*s.*, and a tobacconist uses eight weights, at a cost of 6*s.* Dealing with the general average of all retail trades over the whole of London, we find that the retail trader uses nine weights and 11 measures, and about a tenth part of a lever weighing machine (that is to say, one man in ten has a lever machine), and the average cost to the retail trader to make a change in the system would be 1*l.* 8*s.* 6*d.*, or about 80,000*l.* for London. Of course, I am only dealing with weights and measures used in trade, and more especially in retail trade. That multiplied to apply to the United Kingdom gives a total cost of 720,000*l.* for changing the system.

759. Does

*Chairman*—continued.

759. Does the experience you have gained enable you to give any opinion as to how the present system works—whether it works well in all respects, or whether any alteration in its system is desirable?—So far as general internal trade, and more especially retail trade, is concerned, little difficulty appears to be experienced under the present system, and no complaints have been heard of. Both buyers and sellers understand the system, and appear generally to know nothing of any other. All the inspectors (that is, the London inspectors) consider the continuance of troy and apothecaries' weights unnecessary. With that exception the imperial system appears simple and convenient for retail trade.

760. Have you any opinion to give with regard to the recommendation of the inspectors that those particular sets of weights should be done away with; would there be an adoption of avoirdupois, a system of pounds, ounces, and grains for the present apothecaries' weight, or what do your inspectors mean by that?—They mean that the only complexity in the existing system that they find and the cause of inconvenience, is that troy weights and apothecaries' weights used by bullion merchants and by chemists are unnecessary, and give rise to a certain amount of inconvenience, which would be remedied by the abolition of those two denominations and the substitution of avoirdupois weight, making it the sole imperial weight in the country.

761. You are speaking now, of course, as to the retail trade as between the traders and the buyers in London; have you any experience with regard to the foreign trade; do you intend to say anything upon that subject or not?—I was going on, if you desired it, to give some instances of what an alteration would mean to the retail trade.

762. Do you consider that the retail traders or the retail purchasers would benefit by the adoption of the metric system?—The trader would be benefited by some simplification in book-keeping, which would result from the adoption of the metric system, and there might possibly be an advantage in the ready-money trade in making calculations more readily, and this would be more particularly so if the change were accompanied by the adoption of decimal coinage. The purchaser would probably be able to calculate his purchases more readily than he can sometimes do now, and this would be especially the case in buying such articles as butcher's meat, which is somewhat difficult where there are odd ounces to be calculated. In the sale of meat, poultry, fish, cheese, and similar articles that cannot be delivered in the exact quantity required, the trader benefits somewhat under the present system. When meat is sold at the rate of 10*d.* a pound and upwards, odd ounces are charged for at the rate of 1*d.* per ounce, to the loss of the purchaser; for instance, 1 lb. 3 oz. at 10*d.* a pound would be 1*s.* 1*d.* In the metric system this quantity would be about 5½ hectogrammes, and the rate would be about 11*d.* per half-kilo or five hectogrammes; for the odd half-hectogramme 1½*d.* or 2*d.* would probably be charged, bringing the total cost to 1*s.* 0½*d.* or 1s. 1d., the same as by the other system. I am endeavouring to illustrate what the change in the system would be, and what it would mean to the small retailer, and the small purchaser.

763. Does that argument apply not only to butchers, but to other retail traders?—In the case of bread, bread can be weighed exactly, and it makes no difference, so far as I can see, whether the purchaser pays 2*d.* for the two-pound loaf under the imperial, or 2¼*d.* per kilogramme loaf under the metric system. Then, coming to butter, in the sale of butter and similar expensive articles, the poor suffer somewhat under the present system, especially persons who have to buy quantities of less than a quarter pound. For instance, two ounces of 1*s.*, 1*s.* 1*d.*, or 1s. 2*d.* butter costs 2*d.*, or at the rate of 1*s.* 4*d.* per pound. A similar purchase made in the metric terms would be a half-hectogramme, almost exactly one and three-quarter ounces; the price corresponding to 1*s.* per pound would be 1*s.* 1¼*d.* per half-kilo, which would work out, supposing the small purchaser to be charged 1½*d.* per half-hectogramme, at the rate of 1*s.* 3*d.* per half-kilo, in which case the purchaser is a little better off than he would be by the use of imperial weight. In the case of milk and beer, these are sold retail generally in quarts, pints, and half-pints. Should the metric system be introduced, the litre, half-litre, and the double decilitre would take their places, and the purchaser would suffer a loss of a gill, half-gill, and a quarter-gill respectively. I should think a reduction in price not likely to follow, as it would hardly be practicable. Then as to tea, the small purchaser pays very dearly for his tea. The average price is about 1*s.* 6*d.* a pound, and the purchaser of one ounce would be charged 1½*d.* an ounce, or at the rate of 2*s.* per pound. In many poor neighbourhoods tea of the poorest description is retailed at 1*d.* per half-ounce, or at the rate of 2*s.* 8*d.* per pound. A half-kilo of tea at the same rate, 1*s.* 6*d.* per pound, would be 1*s.* 7½*d.*; and the purchaser of a half-hectogramme could be charged 2*d.*, which would work out at 1*s.* 8*d.* per half-kilo, or only a loss of 2*d.* in the half-kilo; so that in some cases the change to the metric system would be a benefit to the small purchaser, and in other cases it would probably prove to be a loss.

764. Has it come before you that different weights that do not belong to the imperial system are in vogue—in buying and selling meat, for instance?—No; only weights of the imperial system are in vogue. The butcher purchasing wholesale buys by the stone of 8 lbs. That, of course, is a representation of imperial weight; it is 8 lbs. of imperial weight. That is the only case I know.

765. But a stone is usually 14 lbs., is it not?—There is no imperial weight of a stone, but what is ordinarily known as a stone is 14 lbs.; the butcher's stone, which is known between the wholesale and retail butcher, is a stone of 8 lbs.

766. Have you considered the question of how long it would require, supposing such a change of system were decided upon, to make the neces-

*Chairman*—continued.

sary preparation, including the provision of local standards and other practical changes?—Yes, I have considered that point; and I am of opinion that the provision of local standards throughout the country would probably take two or three years, and that the preparation of the people for the change would take a further two or three years.

767. Then, in your opinion, it would be desirable, would it, that a certain period should be set apart as a preparatory time (supposing it were desired to make the change) before the new weights became compulsory?—That is the case. I think that a reasonable period, say two or three years, should be allowed before any new system should be admitted in general use, and that a still further time should be allowed before it became compulsory.

768. Have you any suggestions to make to the Committee as to the manner in which any change of system should be carried out if decided upon?—Assuming that a change is desired, it seems a desirable thing that the educational part of the question should be much more fully developed than it has been hitherto. You have had in evidence before you that the code requires that the metric system should be taught in schools, but I very much doubt whether there is any practical result from that, and whether, if school children were questioned as to their knowledge of the metric system on their leaving school, it would be found to amount to very much. I think the educational part of the question should be much more prominently and actively brought to the front. I also think there should be issued from the Standards Department explanatory information for the guidance of the local authorities as soon as it is determined that any change shall take place, and then that local authorities should, on the basis of the information so given to them, prepare and issue freely, both to the traders and the public in their districts, full information as to the change; and further, that shopkeepers should be required to exhibit in their shops explanatory notices as to the change of system, and also a table of equivalents, as was done in Austria, I believe.

769. Have you any knowledge of your own as to the way in which the change was carried out in the country to which you have referred?—I have no knowledge beyond the evidence which has been given to this Committee.

770. Have you any other information or suggestion which you wish to make to the Committee on the subject?—There is one point that I want to mention to the Committee, and that is as to the question of the permissive use of the metric system for foreign trade. I am of opinion, and it is an opinion shared by my Council, that the prohibition of the use of metric weights and measures for foreign trade is unnecessary, and should be removed. At present, strictly speaking, the law provides that no weighing and measuring for trade purposes in this country shall be done except by imperial weights and measures, and we venture to submit that that is unnecessary so far as foreign trade is concerned, and that any first step made towards a change of system should be in the direction of removing that restriction upon export trade, which presses somewhat unduly upon export traders. They are supposed to use imperial weights and measures in preparing their goods for foreign markets, and then translate them into metric equivalents. I submit that is hardly necessary now, and that that restriction might be removed. A representation on the subject has been made to the London County Council by the London Chamber of Commerce, and I understand a Bill is to be brought forward in the present Session. A draft of the Bill has been forwarded, and the Public Control Committee of the Council have approved that draft, and are going to carry it up to the Council with a recommendation to support the Bill.

771. Is your Council prepared to support that Bill?—The committee have decided to recommend them to do so; it will not come before the Council before this day week, but I expect the Council will support it.

772. It refers simply to the adoption of the metric system so far as our foreign trade is concerned, does it not?—That is so.

773. Whereas for scientific purposes, and the purposes of manufacturing, the metric system can be used, it is not legal so far as trade is concerned, is it?—That is so.

774. Is that opinion founded on the knowledge which you or the London County Council possess with regard to the foreign trade of the Metropolis?—The matter has only come before the Council officially on the letter from the London Chamber of Commerce; but it is so obviously an unnecessary restriction that they found no difficulty in agreeing at once, and that is an opinion which the whole of the staff who have been brought into contact with the work share.

775. Then you would have a dual system; for foreign trade you would have the metric system rendered legal, but your Council has not gone so far as to recommend its adoption for the home trade, has it?—That question has not been before them in any way.

Sir *Samuel Montagu.*

776. You stated that it would cost 720,000*l.* to provide new weights and measures; what do you do when weights are light; do not you rectify them by some addition of lead?—We seize them.

777. But when they are slightly deficient, what do you do?—When they are slightly deficient we give notice to the trader of the deficiency, and require him to cause them to be readjusted. We do not permit in London the London inspectors to re-adjust weights and measures. There is a permissive power in the Weights and Measures Act to do so, and as far as the country is concerned, such a power is necessary, but in London it is not necessary, and it is impracticable, because the inspectors have already as much as they possibly can do, and, moreover, there are traders who are ready and willing to do the work of adjustment practically everywhere.

778. If a light pound weight can be rectified by some addition made to it, why could not the same

Sir *Samuel Montagu*—continued.

same pound weight be increased somewhat, so as represent half a kilogramme?—There would be practical difficulties in the way. A pound weight has a hole bored into it in which a certain amount of lead is poured; that is called the adjusting material, and the stamp of the inspector is placed upon that lead. It would be a rather difficult matter to make a material alteration in the total weight of the pound weight. You would have to make your hole very much larger, and, therefore, your proportion of lead adjustment much larger, and in my opinion that would be very unsatisfactory. Already the lead adjustment is the means by which fraud can be accomplished, and if you increase the proportion of lead adjustment you render the liability to fraud much greater, and you render the liability of the weight to accidental changes also greater. Beyond that, every weight is denominated, and the cost of striking out the denomination and putting the new denomination on would have to be considered. We have considered that point carefully, and altogether we think it would be much more satisfactory and not very much more expensive to have new weights.

779. Then, also, you recommend, in case the metric system should be introduced, a certain number of years before it is made compulsory; during that period would not a good many of the weights be discarded, and could not they be replaced without an additional cost by the new weights and measures?—That is so, no doubt.

780. You suggest that the apothecaries' and bullion dealers' weights should be discarded, and only the avoirdupois should be used. Are you aware that there would be immense difficulties in altering the weight of the sovereign and other standards that are now in troy weight, if a change were made in the way you suggest?—I am aware that any alteration in the weights and measures of a country must inevitably involve a great deal of confusion, and a very great deal of difficulty.

781. And if those engaged in the particular trades indicated using the troy weights were to prefer that the change should be at once made into the metric system, you would see no disadvantage then, would you?—No.

782. As to the amount which you said customers would lose if a change were made to metrical measures, with regard to publicans, do not you think that competition would regulate that matter, the competition of different houses, and that their duty would be to satisfy their customers. Competition would regulate that, inasmuch as they would either charge them a little less, or give them better quality, would it not?—As to the amount a customer would receive under the metric system, as against the amount he receives under the imperial system, in most things I think such an adjustment would occur, but not in those particular things I mentioned, because the alteration is so small. For instance, taking half a pint of beer at 2*d.*, the reduced quantity would really mean about ½*d.* in value, and you could not, of course, charge 1½*d.* for the equivalent of half a pint of beer.

783. But they could give a little better quality, could they not?—Yes, it could be adjusted in various ways.

Sir *Samuel Montagu*—continued.

784. Am I right in saying you think that the metrical weights and measures, if introduced, would simplify and help the internal trade of the country in the way of keeping accounts and saving of time and calculations and such like?—I think if the change had once been made, and both trader and customer had got used to that change, there would be an advantage in the comparative simplicity of the system.

785. Do you see any great difficulty in working in your department, or would there be any difficulty with regard to the London County Council if such a change were made in introducing the metrical system, so far as your department is concerned?—There would be an immense amount of work, but there is no insuperable difficulty in carrying it out, so far as the department is concerned. I think there would be considerable difficulty as far as the public is concerned.

786. Meat in London, you say, is generally quoted by the stone, which means a stone of eight pounds in London, and fourteen pounds in the country; is that so?—I am not clear about the country; in London it is eight pounds.

Sir *Edward Hill.*

787. In the sum of 720,000*l.*, which I think you estimated as the cost of new weights and measures, were you calculating entirely new weights and measures without giving any credit for the value of the old ones?—Yes; entirely new measures. There would be but a very small allowance made for the weight of old metal.

788. But in the case of brass there would be a very considerable credit, would there not?—It would not be considerable, as compared with the value of the measure as a whole.

789. But the material of the measure is brass, and it could be recast, could it not?—There are so exceedingly few brass measures that it would not make much difference. There are a good many brass weights, but a very few measures.

790. However, there would be a certain reduction off that sum, would there not?—Yes, there would be a certain reduction.

791. I think I understand you to say that the poor purchasers at present suffer from the present system of weights and measures?—In certain cases they do. I have given instances, such as tea and butter, and I also think they suffer to some extent in buying such articles as meat, that are sold in a quick way by a sort of auction in poor neighbourhoods, because the seller is able to make his calculation very quickly, but the purchaser as a rule is quite unable to follow it, and there is liability to some amount of fraud there.

792. And you think, do you, it would be an advantage to the poorer purchasers to have the same facility of calculation?—Yes, assuming that the new system, whatever it is, gave the same facility.

793. You admit, do you not, that the present system is not desirable as regards our foreign commerce?—Yes, absolutely.

794. May I assume that you do not deny that the introduction of the metric system would also be of great convenience to our home trade?—I can

Sir *Edward Hill*—continued.

hardly go so far as that, looking to the fact that we have not been able to find yet any serious inconvenience to the home trade from the present system.

795. But do you uphold the present complicated system. If you were going to introduce a system of weights and measures should you introduce the present one or the metric system?—I should introduce the metric system, certainly.

796. You are aware that other nations had similarly complicated, if not worse systems of measures than ours, and have succeeded in introducing the metric system without any serious inconvenience, are you not?—Those are cases where there were very complicated and difficult systems, as for instance in Austria and Germany, where the whole public were suffering from the constant inconvenience, and there was a public demand for a new system, which paved the way for a new system. If there had been the same amount of inconvenience and a similar demand here amongst the people generally, I should see no difficulty; but it is because there is no such inconvenience and no such demand that I see difficulty.

797. You admit that those systems were worse than ours, do you not?—Yes.

798. Do you know the people did not have any very great difficulty in mastering the new system?—I gathered from the evidence they practically had none.

799. And now in this country education is so general that we might reasonably suppose, might we not, that our own people would not be less apt to learn the new system than others?—I think if a serious attempt were made to teach them, that in ten years' time there would be no great difficulty.

800. Why do you say ten years for us, when other nations have done it in four?—I mentioned ten years because that would affect the children now at school, and give the necessary time.

801. You do not estimate the capacity of the brains of your countrymen at ten years as against four years for the foreigner, do you?—I think the English character is one rather slow to assimilate change, I must admit.

802. Slower than the Swiss or the Germans?—Yes.

803. You stated you thought two or three years for the perfecting of the standards, and two or three years in addition would suffice?—Yes.

*Mr. Crombie.*

804. You say that you think there is no demand among the home traders for the change in the system of weights and measures, do you not?—Amongst retail traders I think that is so. I have no evidence of any.

805. Do you think if there was any such demand it would probably come to the ears of your department through your inspectors?—I think it must inevitably do so. We are in touch with every retail trader in London, and we must have known if there was anything of the sort.

806. Then do you suggest running the metric system alongside our present system for foreign trade; do you think any confusion would result from that?—I do not.

Mr. *Crombie*—continued.

807. Do you think that any great expense would be involved in doing so?—That is a matter entirely for the trader. It is a merely permissive system which he will adopt or not as it suits his business.

Mr. *Stevenson.*

808. You said that in your opinion a decimal system of weights and measures would not show its full value except in connection with a decimal system of coinage?—Its greatest value would be with a decimal system of coinage.

809. Would not the logical order be to begin with decimal coinage, and so familiarise the people with decimals and then adopt the weights?—That is a point I have not considered. I think it is a point which does require very careful consideration, but I am not prepared to offer an opinion upon which should come first, if they do not come together.

810. In those countries where you claim the advantage of the decimal system, it is when both the money and the weights and measures are on the same decimal system, is it not?—Doubtless that is so.

811. I presume the restrictions which you refer to which appear in some quarters to hinder foreign trade is the 24th section of the Act of 1878, which says that any person who has in his possession for use in trade a measure or weight not according to the Board of Trade standard shall be liable to a fine; does not the whole thing turn on the phrase "use in trade"?—It does.

812. Would you consider it a "use in trade" if a man packed anything into boxes for export, so many kilogrammes and put them on board a ship for a foreign country; would he be liable to a penalty under this clause in that case?—I think if he had weighed the substances he had sent away for trade purposes, by means of a kilogramme, he would be technically liable.

813. But if he weighed them in his own warehouse and sent them out of the back-door of his warehouse, and did not weigh them over the counter, would not that make a difference?—I think not. I think it might be still used for trade technically, but I do not think any local authority would interfere.

814. Has any local authority ever interfered with such a use of metric weights and measures such as I have described?—So far as I know, it has not.

815. Then what is the necessity for a change, if it can be done now?—I can only answer for London. I think so far as London is concerned there would be no necessity to change the law.

816. Is there an impression abroad among manufacturers that it would be illegal to do so?—Yes, I believe there is an impression of that sort abroad. In fact, in the communication which the Council received from the London Chamber of Commerce it is stated that the action which has been taken which culminated in the introduction of a Bill into the House arose from the fact that one of the Council's inspectors had pointed out that the use for trade of metric weights and measures was illegal. He did not

Mr. *Stevenson*—continued.

not go further than point out what the law was on the subject, and on the law no doubt he was quite right, but he had had no instructions that metric weights and measures used for these purposes were to be interfered with.

817. Then that interpretation of the law has never been tested by a prosecution, has it?—So far as I know it has not. I do not think there is much doubt about it, but it has not been tested, and I do not think it is likely to be tested, because I cannot see that any local authority would feel called upon to interfere in a thing of that sort.

818. I presume, you would not allow metric weights and imperial weights to be used at the same time for selling goods over the same counter?—Do you mean supposing the law was altered and the permissive use of metric weights and measures was allowed in this country?

819. I am presuming such a case as seems to be contemplated by this 24th section, say, where a draper has a metre measure and a yard measure at the same time and uses them for the retail trade. Would not such a case as that come within Section 24?—I do not think that any local authority would allow a retail trader to use metric weights and measures side by side with imperial weights and measures in the present state of the law.

820. Has it not been the principle of weights and measures from the time of Magna Charta downwards that there should be only one weight and one measure within this realm of England?—That is so, but I take it that some side-by-side use for a limited period must take place in the exceptional circumstance of a change of system.

821. Has that ever occurred in our history?—I think not.

822. Supposing, by such a transition as you have been suggesting, it was said the metric system should be permissive after a certain date, what security would there be that a considerable number of traders would take advantage of it?—I think an inconsiderable number would take advantage of it, practically none.

823. Then the permissive period, you think, might pass away and the retail traders practically would not take advantage of it?—That would be so, in my opinion, as to the introduction of metric weights and measures in use in trade, but it would not be so as regards educational purposes. I regard the permissive introduction as very useful from an educational point of view, because it brings the thing nearer home, and makes it of sufficient practical interest to study, and it would pave the way for a compulsory introduction. I do not believe that any great change would take place until after the compulsory introduction had come into operation, and then I think the practical work would begin, and it would take a year or 18 months to get the whole thing adopted.

824. What form would the compulsory introduction take. Would a certain date be fixed after which no pound or ounce weights or gallons or yard measures should be used in any shop in the United Kingdom?—That would be so; some form of that kind would be used, doubtless.

825. Then, supposing some particular time, say the 1st of January, was fixed for that change to take place, what security have you that people would not go on using to the end of December their old weights and measures?—Many of them will; it will be a gradual thing. I may say there is a certain parallel to be drawn from the Weights and Measures Act of 1889. That provided that after the 1st of the following January only stamped weighing instruments should be legal, but it did not provide for a penalty for the use of unstamped weighing instruments for another year. As a matter of fact, the general use of stamped weighing instruments did not come in until the penalty time had arrived, and then we had to give another year or 18 months without inflicting the penalty.

826. Illustrating your remark as to the conservative character of the people?—That is so. Of course I take it that with regard to any change, whatever the time fixed, it would have to be administered with a certain amount of discretion.

827. In the case you have just mentioned, was it merely an alteration of weighing apparatus?—Yes.

828. Whereas, with regard to the change we are discussing now, it would be an alteration of all the units, would it not?—It would be an alteration in the whole system.

829. A change in the language in fact?—Quite so, a change in the language, and a change in custom and habit.

830. Can that be as easily done within a limited period of years as the change in weighing machinery?—It could not.

Mr. *Godson.*

831. I think you said that running a national system and an international system together, would not result in confusion in your opinion?—Where the permissive use of metric weights and measures was confined exclusively to export trade, no, I do not.

832. But do you not know that in Germany they found it impossible to carry out one national system and an international system of weights and measures?—No doubt, but the conditions affecting Germany would be very different to the conditions affecting England. Their trade is largely local in character, carried over a lengthy border, and they would feel the necessity of a general system very much more so than in an insular kingdom like ours.

833. Can you tell me how many different kinds of weights and measures are now legally in existence under our present system for trade purposes?—I forget how many. There are a great number, but the weights in general use are comparatively few in number, say, half-a-dozen.

834. Taking measures, there are an immense number of measures all over the country, are there not?—Yes, there are a large number of measures of capacity.

Mr. *Godson*—continued.

835. May I take it generally that there are a great number?—Yes.

836. Under the new system, supposing the metric system came in, there would be very few to learn, and very few to apply, would there not?—Undoubtedly the system would be very much simpler. I see nothing but advantage when the change has once been made.

837. The difficulty is bringing it about, is it?—That is it.

838. Can you tell me, from the tables you have before you, how many of the weights brought to be stamped were new or old?—They were nearly all new. Only a very small proportion were readjusted weights.

Sir *John Barran.*

839. May we take it from you that you think it very desirable that permission should be given to use the metric system in regard to foreign trade?—That is so.

840. And with regard to the decimal system for the home trade, if adopted, it will be of great general advantage, will it not?—I do not think my evidence goes quite so far as that.

841. I mean in its practical use?—I think I may put it in this way: so far as our experience from actual contact with the seller and the purchaser in London goes, no change appears to be called for.

Sir *John Barran*—continued.

842. I am not speaking of it in a pecuniary sense, but the educational advantage and simplicity of the thing. First of all, may I ask you if we adopt the decimal system, whether it would not be a very great educational advantage by saving time and teaching the young to calculate?—That is my opinion.

843. And that when that plan was adopted, in all probability our general trading would be simplified, and the result to the public would be beneficial?—The ultimate result to the public would undoubtedly be beneficial.

*Chairman.*

844. Have you made inquiries among the bullion dealers and merchants, pharmaceutical chemists, and the diamond merchants and traders in general who use the smaller system of weights, such as troy weights, whether they are in favour or otherwise of the adoption of a metrical system. Can you tell us anything about that?—I am afraid I cannot.

845. Is there any other matter which you wish to bring before the Committee?—I think not.

846. In general do you consider it desirable or undesirable that we should have more than one system of weights?—Undesirable.

Mr. Alfred John Street, called in; and Examined.

*Chairman.*

847. You, I believe, are the Chief Inspector of Weights and Measures for the City of London, are you not?—I am.

848. Are you prepared to give the Committee some evidence as to the extent to which the system of metric weights and measures is used in the City?—Yes.

849. Will you tell us by whom the metric system is adopted and in use?—I find in coming into contact with some large wholesale dealers, especially those who are transacting business with foreign merchants, that they greatly approve of the metric system.

850. But can they use it at the present time?—They practically do use it in their business.

851. In what way?—I understand that they receive a great many of their goods and their invoices on the metric system, which are converted into avoirdupois according to their requirements in this country. As to goods they export, they receive the orders by the metric system; they transfer the quantities and English terms into the metric system, and make up their invoices accordingly.

852. They weigh out their material, then, in pounds and ounces, and put as many pounds and ounces as correspond to the grammes or kilogrammes which they are required to send, do they?—That is so as to weight, I believe; in measurements they frequently use the metre.

853. Do they complain about this system as being cumbersome, difficult, and taking time and trouble?—Yes, but not seriously. I have often come into contact with different users of the present system, and, though they have not gone out of their way to complain, I have often heard them say it would be much more beneficial to them and England at large if that foreign system were adopted.

*Chairman*—continued.

854. They are not in love with the dual system, are they?—They are not.

855. In your experience, is the dealing with metrical weights and measures or the employment of the metrical system of considerable amount in the City?—It is in large wholesale warehouses which transact business with people abroad; it is used largely by chemists and apothecaries, who frequently have to make up prescriptions in German and French, which they weigh by the metric system, and likewise bullion merchants, silversmiths, and jewellers.

856. Is the amount of trade thus carried on by the wholesale houses considerable?—There are a great many wholesale houses and a number of bullion merchants who use the troy system, but they are in favour of one general system. The majority of them would welcome the metric system.

857. Have you any observations to make with regard to the home trade?—The home trade do not appear to be so anxious; from conversations I have had recently (although my experience extends over a number of years), I am led to believe that they do not feel the pressure which the people engaged in foreign trade do.

858. Well, what do you say about the retail traders?—The retail traders are very much against it on the whole. In conversation with me,

*Chairman*—continued.

me, they have admitted that if they thought it would be beneficial for trade, and it would be as likely to render as good service, they think they ought to adopt it. They seem to have an impression if it was beneficial to themselves, and likely to create a foreign trade, and bring more grist to the mill, they would not mind the inconvenience, but they want to be satisfied that it would do so.

859. They do not appreciate the importance of the simplicity, do they?—I do not think the majority of them have studied the matter sufficiently to understand that, especially the smaller traders.

860. Probably they do not understand the system; do you think they know anything about it?—I do not think they do, especially the smaller traders. If they were educated up to it, I think they would appreciate it.

861. Do you think it mere ignorance on their part rather than any other reason in the nature of things?—Yes, in some instances.

862. As to the use of the troy ounce by bullion merchants, and its bearing on the metric system, do you find that bullion merchants have any difficulty or express any opinion on this question?—The only difficulty the bullion merchants have expressed is as to using the now obsolete weight of 12 grains, the old halfpenny weight. I came into contact with several of them a few years ago, and called their attention to the fact that there was a weight which had now become obsolete, and advised them to use a 10 and a 2, or two 6-grains, but they objected to that, and on referring the matter to the Board of Trade (in fact I referred it to the City Solicitor in the first instance, and he communicated with the Board of Trade), they thought, under the circumstances, that in that trade they might be permitted to use the 12 grains weight, and they have used it ever since.

863. Have you ever had any expression of opinion from these gentlemen on the advisability of adopting another system, the metric system, for example?—Yes, they are, on the whole, favourable to the metric system.

864. Do they feel that the system adopted at the present moment, being a different system to that which other persons employ, creates difficulty and awkwardness?—That is so.

865. Have they expressed any opinion that there would be any insuperable difficulty in making the change?—No; I have not heard any complaint of that description.

866. Does the same remark apply to diamond merchants?—Diamond merchants, yes; as to the carat, which is not a certified weight.

867. Have you heard from them whether there would be any objection to employing the centigramme in place of the carat?—I have not come in contact with diamond merchants so much as I have with jewellers and silversmiths, but those I have met are in favour of the metric system.

868. Do you include jewellers and silversmiths in bullion merchants?—Yes; most of the jewellers are in favour of the metric system; not all of them, but, I should think, taking the average, two-thirds of them would be in favour of it.

*Chairman*—continued.

869. They use the troy weight, do they?—They use the troy weight at the present time.

870. The carat, of course, is only used for weighing diamonds and other precious stones?—Yes.

871. Is it used for weighing pearls?—I believe it is.

872. Have you anything to say as to the sale of articles such as corn, vegetables, meat, &c.?—Yes.

873. Could the weights now employed be converted into metric weights, in your opinion. The Committee have just heard from the last witness that he thinks it would not be advisable to convert the weights, but to have new ones, altogether?—It would be possible, in some instances, to convert some of the weights, but not practicable. I think it would cost more to convert them than to buy new ones.

874. Then you rather agree, do you, with the last witness as to that?—I do.

875. Do you find in your experience that any different weights or measures are employed beyond the Imperial Standard now at present legal?—No; there are such things as potatoes at certain seasons of the year, and greens and fruit sold at sight by the sieve (which is supposed to be a bushel), the half-sieve, and so on. There is also a sale of a bag of greens, turnip-tops, brocoli, and so on. At certain times those things are not sold by weight, and no weight is guaranteed.

876. Do you ever take any proceedings against people who sell in this way?—No, we are not empowered to take any proceedings under those circumstances.

877. That applies to fruit, too, does it?—Yes.

878. The Committee have heard about the 8lbs. stone of meat; what do you say as to that?—We do not recognise a stone of 8lbs. Butchers have been in the habit of quoting their meat per 8lbs., and they distinctly used to use the stone some years ago, but the Corporation had a number of bills printed which were placed in the Meat Markets calling their attention to the fact that the 8lb. stone was illegal. Since then butchers have quoted the price of their meat at per 8lbs.

879. I see here in the "Meat Trade Journal," the rate quoted per stone live weight?—They mean 8lbs.

880. Then they do use it still, do they not?—They do not print it in the market.

881. If you go to a butcher, and ask for a stone of meat, what would he sell you?—A buyer in the market might say, "What is the price of this?" and the seller would say perhaps "5*s.* 4*d.*" If he becomes the purchaser, the salesman will shout out "one—two—5*s.* 4*d.*," meaning one division of 8lbs. and 2lbs. They do not use the word "stone."

882. But 5*s.* 4*d.* is the price of the 8lbs. of meat, is it not?—5*s.* 4*d.* is the price of the 8lbs. of meat.

883. And that is called a stone?—Well, that is the old-fashioned stone we do not recognise, and we will not, if we know it, permit them to use the word "stone."

884. Is it a fact that a stone of meat out of London is 14lbs.?—Yes, in some places, and they sell it by the score in other places.

*Chairman*—continued.

885. Do you think it might be practicable to convert the 28lbs. and 56lbs. weight?—That might be done, but at some expense. I do not think that would be practicable; those are the two weights most largely used, and it would be a big consideration with some people.

886. You mean those larger weights, being more costly, it might be desirable to alter those to make them fit in with the metric system, whereas it may not be so desirable in the case of smaller weights?—That is so.

887. Do you think there would be a great objection on the part of the wholesale people to adopt a weight of 100 kilogrammes or 100 half-kilogrammes?—I could not answer for them as a body, but those I have come into contact with take into consideration any advantages the country might gain, which they are under the impression they would, by an easy method of transacting business with the foreigner, and they might waive their objections, and fall in with the new system.

888. Have you any experience with regard to the foreign trade; do you know whether the foreign traders complain more than the home traders of the present system?—I know that there are a great many complaints, but I have not had time to look up the evidence to speak with any certainty on that matter.

889. We have heard that the lever weighing machines will require alteration, whereas an ordinary balance would not require alteration?—Quite so.

890. What is your opinion as to the possibility or cost of converting the compound lever of a weighing machine to metric units?—The compound lever machine, I believe, is comparatively easily converted into the metric system; the cost I should not like to say so much about. It might be 40*s.* on a five-hundredweight machine a little more or less, but I should not like to commit myself to a figure.

891. Can you tell the Committee what mechanical alterations would be necessary?—The steel-yard in some instances, I believe, could be re-ground and re-graduated, or a new steel-yard could be supplied. Then the counterpoise weights could be fitted to meet the requirements of the metric system.

892. It does not require any alteration of the mechanism below the ground, I presume, does it?—I believe not.

893. It is only the steel-yard which might require lengthening or shortening or re-grinding, and you might require to have other counterpoises placed at the end of it?—That is so.

894. That does not interfere with the mechanical arrangements of the weighing machine, does it?—No. Then on some machines there is no loose counterpoise weight; the weight is taken from the long steel-yard with running counterpoise, called a carriage and jockey-weight. Those, I believe, could be so converted as to meet the requirements.

895. Then, in your opinion, there would not be any great difficulty about it, would there?—No.

896. Supposing the metric system were adopted in this country, would it, in your opinion, be desirable to have weights and measures so stamped as to show both the metric weight or measure, and its equivalent in the imperial system?—I am of opinion that if the system were adopted to facilitate the public, and especially those who are not so well acquainted with the weights and measures as the wholesale people are, it would materially assist them if the equivalents in English were placed opposite the metric quantities.

897. Then you would have the metre divided on one side into 39 units; and, on the other, into the decimal parts of a metre; would you?—I think that would help them.

898. Are you aware that that is the case now as to a great number of measures which are in use at the present moment?—I am aware that there are a very large number of those measures made.

899. Might not there be any difficulty, in addition to the weights, because the weights would not correspond; the kilogramme and half-kilo would not be exactly a pound, of course?—Exactly so.

900. Would you put the fractions on?—Yes.

901. You would stamp the weight with a half-kilo, equal to such-and-such a fraction of a pound; would you?—Yes.

902. And so with regard to the measures of capacity?—Yes.

903. I think you have a set of weights and measures with you, have you not?—I have a set of litre measures here (*producing the same*); I have also here a set of carat weights.

904. Are those certified?—No.

905. They are not legal weights, are they?—They are not a legal weight, but they are very largely used.

906. Have you any other evidence you would like to give the Committee?—No.

Mr. *Alban Gibbs.*

907. You said that the retail traders would object to the metric system; can you tell me at all on what ground you think they would object—Principally, I think, because they have not been educated up to the matter; they have not given the matter sufficient thought.

908. Do you mean because they do not understand it, or that you think they would not be able to sell equally well by tenths; do you think they think it practically would not be so convenient for them to sell by the decimal system as it is now by the duodecimal?—I personally think they would not have much difficulty, but I was endeavouring to put the evidence before the Committee which I have gleaned from those I had come in contact with.

909. Do you think they object because they do not understand it, or do you think they object because the 10 is not so easily divided as the 12?—My answer to that is, seriously I do not think they understand it.

910. Quite so, and you do not think, do you, there would practically be any inconvenience?—Personally, I do not.

911. You

Mr. *Stevenson.*

911. You suggested, did you not, a quotation by the 8 lbs. for the wholesale price of butcher's meat at 5*s.* 4*d.* ?—Yes.

912. Does not that work out exactly at 8*d.* a lb. ?—Yes.

913. Is it not much easier to talk of 8*d.* a lb., and drop this illegal stone?—The butchers say no; they have been taught this system from time immemorial, and they have got into that particular way that they find it difficult to use any other, and unless there is some law to compel them they seem to be very persistent in continuing to sell the meat in the way I have described.

914. As long as they study their own habits of business they will not make any alteration? —That is so.

915. Do you think they would take kindly to any compulsory alteration of the law?—I believe the butchers of London would very seriously object to it.

916. And considerable opposition would be encountered, would it not?—Quite so.

917. Although it makes no practical difference in their quotation?—Yes.

918. With regard to silver, if the silversmiths, and people who deal in silver articles, were to adopt the metric weights, would it not involve a total alteration in their prices?—Yes; but they have, no doubt, considered that. I have received answers from several of them that they are in favour of the metric system.

919. Perhaps they did not realise that their whole language of price would be entirely upset by it?—I think the jewellers would recognise that fact.

920. You are aware, are you not, that in these days the price of silver per ounce is a matter of interest to all the mercantile world at home and abroad?—Yes.

921. And that the daily price of silver quoted in all the Exchanges in the world is so many pence per troy ounce. Would not the changes we are talking of make that quotation unintelligible?—But the metric system being so largely used abroad I should have thought the foreigners would more easily understand it.

922. I am giving the quotations in London of so many pence, or so many fractions of a penny, per troy ounce; that quotation of price would be unintelligible if the change be adopted, would it not?—I do not think they realise that difficulty.

923. Can you imagine a state of affairs where the money article in newspapers should quote up to a certain day silver at so many pence per troy ounce, and the next day quote it as so many pence per some unit of the metric system? —Of course, there is no doubt by adopting the metric system there would be many difficulties to surmount which some of the retail traders, if not all of them, see; but taking all things into consideration, I think the difficulties which would arise in the adoption of the metric system after a certain number of years would not be so great as we experience now from having avoirdupois, troy, and apothecaries' weights.

924. Practically, is not avoirdupois the weight of 999 transactions out of every 1,000 that go on. Is it not an extremely small fraction of transactions that are carried on in apothecary and troy weights?—Chemists use both apothecaries and avoirdupois.

Mr. *Stevenson*—continued.

925. With regard to reports from the gold mines, we hear that ore is going to work out at so many ounces of gold to a ton. This is a troy ounce with an avoirdupois ton, which seems anomalous; but is it not the case that everybody understands it, and to alter the language in which the value of this mineral is quoted would cause confusion?—There is no doubt if the change took place there would be confusion for a period; but if I might suggest an illustration, I would ask that it should be compulsory that all traders should have exhibited in their shops cards with the equivalents in the two systems, so that it might assist an ignorant person who wanted to purchase a pound of tea, and he would know that he would receive a pound, or an ounce and a half, or a decimal part of the kilo in addition, and also the prices worked out. A table could be made which would show him at a glance what he had to receive.

926. Take the case of a man who has been accustomed to buy his ounce of tobacco; he perfectly understands the weight and the quantity of it, but if under the new system he is to get 28 grammes, and a large decimal besides, what do you think would be the result?—I do not think that it would be unfavourable to him.

927. But do you think the man behind the counter would not have the intellectual advantage over the man before the counter, and take care that the change went in his favour?—I say the card should be so arranged that the purchaser should see it.

928. But how can it benefit the purchaser who wants his ounce of tobacco, to which he has been accustomed all his life, and knows how much it is, not to be able to get an ounce if he wanted it, but be obliged to take 28 grammes and some decimal?—If it was not convenient to serve a smaller quantity, he might be asked to take a little more or less of the grammes, and the table would show how much more or less he would have to pay for it under the circumstances.

929. Do you not think the British workman would object to that?—No doubt he would, especially the man who is in the habit of asking for a half a pint of beer.

*Chairman.*

930. He would not object if he happened to get rather more than the ounce, would he?—No, they do not complain then.

Mr. *Godson.*

931. I understand from your evidence, that those trades who at present use the troy and the apothecaries' weights would sooner be forced to go direct into the metric system than to give up their present system and be forced to go into the metric system afterwards; they would sooner have the alteration made once and for all?—That is so.

Sir *Edward Hill.*

932. You told the Committee that a stone of meat is 8 lbs. If a pig is sold by the stone, how many pounds are there in that stone?—Eight lbs.

Mr. *Crombie.*

933. You said that you thought the small traders would like to see the metric system adopted if they thought the trade would benefit, did you not?—Exactly so.

934. Do you think that trade would benefit, as far as they are concerned, by the adoption of the metric system?—As a public officer, I think I ought to remain neutral. Personally, I think it might.

935. Do you think they consider in any way the trade would benefit, as far as they are concerned, by the adoption of the metric system?—I have figures here showing that 420,350,186 people in about 35 different countries use the metric sytem; and as English trade is largely based on her exports, I can come to no other conclusion myself personally than that it must facilitate trade.

936. I think you have rather misunderstood me. I was talking of the small retail traders who do not do a foreign trade. I understood you to say that their position with regard to the adoption of the system is this: that they would be perfectly willing to adopt it if they thought it would benefit their trade?—That is so. If you speak to an ordinary trader about converting the present system into the metric system, he will say, "I have gone on like this for a number of years; I do not want to be bothered by it;" but if you remind him he has a family growing up and might have grandchildren, and that it might be to the advantage of his progeny to adopt the metric system by making it easier to transact business abroad, he would say, "If that is so, the sooner it comes the better." That is the sort of reply you get from men of that description.

Mr. *Crombie*—continued.

937. That is to say, if he thinks other traders will benefit he will benefit, too?—Yes; if he thought it would benefit his children, or make the country more prosperous, he would put up with the inconvenience for the public good.

Mr. *Wrightson.*

938. I suppose there will be no less retail trade done after the change than before the change. The same amount of retail trade would have to be done, but at some little inconvenience? Exactly so.

939. On the other hand, there might be a great loss of foreign trade by continuing our present system, you think?—That is my opinion.

940. Therefore, for the good of trade altogether, you think it would be better to make the change, do you?—Exactly so.

*Tuesday*, 26*th March* 1895.

MEMBERS PRESENT:

Mr. Burt.
Mr. Crombie.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Stewart Wallace.
Mr. Wrightson.

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. H. E. WOLLMER, called in; and Examined.

*Chairman.*

941. I BELIEVE you are a partner in the firm of Sir Jacob Behrens and Sons?—I am interested in the firm.

942. You represent them, do you?—Yes.

943. That firm, I believe, has large dealings both in the home and foreign trade?—Yes.

944. Will you tell the Committee exactly the business your firm carries on?—We carry on business in Manchester, Bradford, Glasgow, and London, and then we have a house in Calcutta and one in Bombay.

945. Do you chiefly deal in Manchester goods?—In any textile goods. We also deal in machinery, and other miscellaneous articles.

946. Are those goods exported all over the world?—Yes, practically anywhere.

947. Yours, therefore, is rather a foreign house than a home trade, is it?—It is altogether a foreign house, with the exception of Bradford, where we do a large home trade.

948. Have you had considerable experience in this country; how many years have you been connected with your firm?—Over 25 years.

949. Therefore you can speak with experience as to the effect of the present system of weights and measures upon your particular trade?—Yes, I think so.

950. You have also, I believe, had foreign experience?—Yes.

951. Where did your foreign experience begin?—It began in Germany, and afterwards in Belgium.

952. Are you acquainted with the system of weights and measures as formerly carried on in Germany, and also as carried on at the present moment?—Yes.

953. Would the same remark apply to Belgium?—In Belgium the metric system was in use when I went there, but in Germany it was not adopted whilst I was there.

954. From you experience are you able to give the Committee an opinion as to the difference between the metrical system, and our system of weights and measures?—Yes.

955. With regard to the suggested difficulties of introducing the metric system, what have you to say?—I think it will be found far easier than most people suppose. In Germany they gave three-and-a-half years for the introduction. The law was passed on the 17th of August 1868, and it became compulsory on the 1st of January 1872, so that there were three-and-a-half years allowed. During those three-and-a-half years you would find in many shops the new weights put on the counter, the names of the weights above them, and above that the shopkeeper would put what those weights meant as compared with the old weights, and after two or two-and-a-half years, practically every customer who went to the shop knew the corresponding weight of the one with the other. I have seen workpeople and middle class people, but especially workpeople, taking a pride in coming and asking under the new weight for a thing which was being sold according to the old weight, just to show that they had grasped it.

*Chairman*—continued.

956. Do you think that there is any reason why the metric system, supposing it were proposed to adopt it, would not meet with a similar acquiescence on the part of the English people?—I do not see any difficulty about it at all.

957. Have you in your business found some difficulties with regard to the present system as regards foreign trade?—We have found great difficulties.

958. Will you describe what those difficulties are?—In the first place, in the countries which use the metric system we have to sell practically everywhere in the metric system. Therefore all our weights and measures must be calculated, which, of course, makes a tremendous amount of work, and besides, involves serious risk.

959. You cannot now in your trade use the metric weights or metric measures for weighing or measuring your goods in trade; do you practically use the kilogramme weights and metric measures?—Yes; if you will allow me, I will show you one of our invoices which will give exactly the way in which they are made out. I think that will be perhaps the best way and the most simple way. I have here an invoice for Mexico which will give you the full details (*the Witness handed the invoice to the Chairman.*)

960. What you have placed before the Committee

*Chairman*—continued.

mittee is a declaration for the Customs in Mexico, is it not?—Yes.

961. The weights are made out in kilos, and the lengths in metres and centi-metres?—That is so.

962. Is that a necessity in the case of a great many of the countries with which you deal, not only Mexico?—Quite so. In fact, we have to invoice to all the Southern and Central American countries, and to France, and nearly every European country in kilos and metres, but to some of the South American and Central American countries, we have to make a customs declaration like the one before you. If we make the slightest slip of the pen we are fined and heavily fined, even in cases where we declare more weight than the invoices should contain; therefore, even when paying more duty than we ought, simply through a mistake, still we are fined and heavily fined.

963. Do you mean to tell the Committee that the risk of mistakes in calculating, which as I understand you, you are obliged to do now from our weights and measures to the metrical system involves you in trouble and expense?—Very serious risk and great expense. Every shipping house in Manchester of any size which does any trade has several clerks who do nothing but calculate and re-calculate from yards into metres, and from pounds into kilos, and so on.

964. Do you consider that in that way the trade of this country is heavily handicapped as compared with Germans or any other foreign competitors?—Naturally, because any buyer will prefer to buy from a man who uses the same weights and measures as he does himself. Those countries, of course, find not the slightest difficulty because they have identical weights and measures, the weights according to which they manufacture and according to which they sell.

965. Is it your opinion that an English person dealing with those countries which have adopted the metric system is at a disadvantage as regards other producing countries who have adopted the metric system?—Most decidedly, and they make every use of it.

966. In what way?—The tendency of all trade is to come nearer to the consumer, to avoid the middleman. Formerly all the business was done to import houses in these foreign countries, and they, of course, made it their business to buy in yards and pounds, because it was a business secret, and their customers did not understand it. Now these men are left on one side, on account of competition with foreign countries, mainly, and the foreigners are the first to go to the retailers in these foreign countries. We have now to go to these retailers too, and naturally those retailers do not understand yards and pounds and ounces, but prefer to buy in metres and kilos. Therefore we are obliged to adapt ourselves to the circumstances of those countries.

967. Do you mean to say that now, owing to the amount of competition going on, the large houses such as you represent are obliged to go direct to the retail consumer or buyer in those countries, whereas formerly, when the competition

*Chairman*—continued.

not so keen, the trade fell into the hands of middlemen?—Yes. Those middlemen, of course, made it their business to convert from one to the other; that was part of their business, and they got their profit in that way, but now we have not got those middlemen it becomes a necessity to sell in kilos and metres to those countries.

968. Do you consider that during the past 30 years the question has assumed different proportions?—Yes.

969. I mean to say that the necessity of adopting a system which has now become almost general has become greater than it was 30 years ago?—Most decidedly so, because there are so many more countries which have adopted the metric system, so that practically now all South America and Central America are under that system. In the same way all the European countries now, with the exception of England and Russia, have the metric system, and even in Finland it is optional to-day to use the metric system.

970. Are they considering the question in Russia?—In Finland it is optional, and has been for some years.

971. In view of the competition which England has now to encounter with other manufacturing countries, do you think the pinch is felt more keenly than it was 30 years ago?—Yes; not only on account of inconvenience, but on account of the great expense involved in doing the extra work which would be totally unnecessary. For instance, in measuring our bales, we take the length, the breadth, and the depth of a bale in inches and feet; then we have to convert those into cubic feet and inches. Of course, they have first to be converted into inches, then square inches and cubic inches, and if a slip is made it is wrong. Then those feet are converted into shipping tons, which are reckoned 40 cubic feet, as a rule. Of course, we have books of tables to help us, similar to one I have here, but still it is very troublesome work.

972. In what way would the adoption of a metrical system ease you in that matter?—If you have metres and centimetres it is a very simple matter to multiply them.

973. To bring it up to ship tons, do you mean?—Yes; here you have to convert the pounds into ounces, make the square; and if you come to cube it you have to multiply again by 12. That makes all sorts of figures necessary, but if you had the metric system, it would be simply a question of shifting the comma, and there you would have it.

974. I suppose you could not give the Committee an idea of what the actual expenditure incurred is in making these unnecessary calculations?—You may reckon one clerk for the measuring of bales, casks, cases, and so on, in order to get them ready, and then several clerks to make the other calculations for kilos and metres, and so on, for the invoices and for the Customs declarations.

975. Then in a firm like yours it takes, say, half-a-dozen men, does it?—Say four to five men, whose work could be saved if the metric system were in use. In the same way we have all sorts of

*Chairman*—continued.

of disadvantages in detail which people do not know of.

976. You have handed to the Committee your statement for selling yarns; is that so?—It is a scale for testing yarns as to their weight and length. When we do that we have to wrap a number of leas, weigh them on a scale, and, according to the weight, fix their number.

977. The ounces, I see, are avoirdupois, but the pennyweights and grains are troy weight; why is that?—Because that is the adopted table which has been in existence from the earliest times, you may say, and is in existence now; it is the official table in Manchester.

978. Will you explain how far that is a source of disadvantage to you?—It is a disadvantage in so far that nobody understands it. Any ordinary man getting that table, or any clerk being asked: "How do you calculate?" would not give you any answer; he simply refers to the table, and he says: "I find if I have one ounce of avoirdupois weight and so many pennyweights, it is so much"; whereas, if it were metrical, he could give it to you.

979. In fact, you would not want a table, would you?—No.

980. For instance, I see you have here one lea to seven leas, and the hanks from one to 300, giving the weights in ounces, pennyweights, and grains?—Yes.

981. And the decimals of a grain go to three places of decimals; is that so?—Yes.

982. Is that a very complicated method of calculation?—Yes; it is got up by someone who has tabulated it, because everybody could not do it. You adopt it as correct; you cannot check it yourself without tremendous labour.

983. The Committee have heard from previous witnesses statements as to the widespread nature of the English system of counts and make-ups in the yarn trade, and it has been stated before them that it will be extremely difficult to make a change from the present system of an eighth of a penny per pound, and so many ounces to the hank, and so forth, inasmuch as it is a method which is now universal throughout the civilised world dealing in these goods; what have you to say about that?—There, certainly, would be a disturbance if it were adopted, and I should not be in favour of it, unless it became universal; but, at the same time, many use to-day, for instance, in the yarn trade—at least, I use myself in my office—nothing else but testing machines based on the metric system. All my machines represent half a metre, or a metre, or a kilo, and so on, although I am testing English yarns, which are made up according to English weight.

984. Your tests are made by the metric system, but when you come to sell your yarns, you are obliged to adopt ounces, pounds, and yards, are you not?—We sell in kilos very often, but still the make-up is English, 840 yards to the hank, and if they are wanted in kilos, as a rule, we make 11 lb. bundles, which represent five kilos.

985. I suppose in this case it is only when foreign competition becomes acute, that our exporters are compelled to accommodate themselves more and more to the metrical system?—Yes, especially in goods; it does not affect yarns quite so much, because they are still reckoned on the old system; but in the case of goods it has changed entirely, and is changing every day, and very soon the metric system will be adopted by every country as far as purchasing goods is concerned.

986. Do you mean in cotton cloth as well as in woollen goods?—Yes.

987. Do you think the system of selling by the kilo and metre is gaining ground?—Yes, it is nearly universal now, and in countries like Mexico, for instance, if you sell any woollen cloth you have to pay so much duty for goods under 100 grammes per square metre. Up to a 100 grammes per square metre you pay a certain duty; if it is from 100 to 250 grammes per square metre you pay another duty; and, therefore, if we sell to those countries we have first to reduce our yardage into metres, then we have to take the width of the cloth and make it into centimetres, then we have to put the net weight of the goods into kilos and grammes; then the result must be worked out, and if the slightest mistake is made, as I said before, we are heavily fined, and get nothing for it.

988. Have you any other suggestions to add with regard to the disadvantages in your foreign trade of the present system?—I think those I have named are the main disadvantages, unless you want to include, perhaps, the machinery for producing all kinds of textiles.

989. The Committee will be glad to hear your remarks about the machinery; does that form an important part of your trade?—Yes, we deal with a fair quantity of machinery ourselves, and it is an important trade in Manchester. Spinning and weaving machinery go away in very large quantities; the continental machine makers have been trying to take the trade away from here, because they found by making their machinery on the metric system they were in entire harmony with those countries which are the largest buyers.

990. Have they succeeded in doing so, to some extent?—In many instances they have succeeded, and where they have not succeeded it has been simply because our machine makers have also adapted themselves to the metric system at great expense, and at great trouble; they want many clerks to make their calculations, and, in some instances, they must have a double set of tools to work with. For instance, for screw-cutting and so on, they must use the millimetre, because when it comes to very small dimensions it is impossible to reduce into inches and so on with any certainty these very small measurements, and naturally the buyer prefers to buy on his own terms, because he is absolutely certain, no matter however small the measurement is, that he will get the very thing he wants. If he asks for one millimetre or half-a-millimetre he can get it, whereas if you say, "I can give you such and such a fraction of an inch," he will laugh at you, because he does not understand you, and he will not have it.

991. Then, do you think that in the engineering trade the disadvantages of our present system are greater than in those trades engaged in textile manufactures?

*Chairman*—continued.

manufactures?—I would not say so as to piece goods, but they are certainly greater than in the yarn trade.

992. Have any cases come under your notice of tenders that have been made in the engineering or any other trade, by Englishmen, which have been refused because those tenders were not made in the metrical system?—No, I have not come across any which have been refused, because those who have tendered have made their tenders in the metric system, and those who could not or would not have been excluded.

993. What advantages do you see in regard to competition of working on the metric system?—Because, in the first place, it simplifies everything, a man need not make any special calculations. Now if he wants to sell in another country as well as here, he has to calculate everything. Then, again, if you take our pounds and ounces and hundredweights, and so on, look at the tremendous work it involves in calculation, whilst with the kilogramme it is nothing. Take a spinner who imports his cotton, he buys it in pounds. When it comes to Liverpool the freight and carriage are calculated at the hundredweight, that has to be worked out; when he gets it to his mill and spins his cotton he has to convert it back again into pounds, because he sells in pounds. In the same way, if you want any great number of pounds it is so difficult to weigh them. If you take any large quantity of any material and want to weigh it, you have to scheme as to which is the best way of weighing it; whereas if you do it in kilos it is very simple.

994. Have you any other reason to give making it in your opinion advisable to adopt the metric system, such as our system being unknown abroad, for instance?—If you take a continental buyer, or a South American buyer, or anybody used to the decimal or metric system, when they come here and you mention yards and inches or pounds and ounces it is simply a mystery to them, and they do not know what you mean. They must have someone with them who can convert the weights, or have a book in their pocket, so that they can refer to, to see what it means, whilst if you go to any of the other countries any child can tell you how many grammes there are in a kilo, and how many centimetres there are in a metre. I think it is a great hardship here that we have not even a weight to express a hundred pounds; we have the cental, which was adopted and made law, but there is no weight expressing it. You can get no weight made or stamped to represent the cental; one weight would do it beautifully, but now if you want to weigh 100 lbs., it means you must take a 56 lb., 28 lb., 14 lb., and 2 lb.; that is the smallest number you can have. Now, if you had the decimal system one weight would do, and it would certainly be 10 times more easy to weigh any large quantity of goods by the decimal system than it would be by the present one. Therefore, if the metric system be not adopted, I should be strongly in favour of adopting at least the decimal system.

995. Are you in favour of adopting a decimal system, or in favour of adopting the metric system?—I should prefer the metric system

*Chairman*—continued.

because it will come, in the long run; it has to come, it is only a question of expediency whether it should be done at once. Take Germany: they made their pound into a half kilo, left it there for a time so that people might get used to it, and after that they made the other change.

996. Is it in your opinion desirable that the metric system should be adopted in view of any objections which might be raised on the part of the people?—I should say those objections would soon disappear if they once got really to test what it means; if they saw the simplicity of it I think there would be very little objection and the difficulty would not be very great.

997. Perhaps you are not acquainted with the amount of education given in the schools of this country with regard to the metric system?—It was taught in our schools, and was adopted and made compulsory for a time. It has been dropped since, but it would be a great advantage, and I think it is absolutely necessary the metric system should be taught in our schools as a preparatory step for the introduction of the metric system, and the decimal system in the same way. I think in the same way a proposal might be made to put a thousand farthings to the pound and make the florin the unit, so that you would simply have the florin and a hundred, whatever you like to call them.

998. Are you able to give the Committee any sort of idea as to the relative amount (taking the Manchester trade of which you have great experience) of the foreign and home trade. What proportion does the foreign trade done in Manchester bear to the home trade?—The foreign trade of Manchester is much more important than the home trade of Manchester.

999. Do you think that applies to many other great centres of manufacturing industry?—At Bradford the foreign trade is more important than the home trade, I should say.

1000. Therefore, so far as Manchester is concerned, the advantages that would be felt by the adoption of the metric system would be, in your opinion, considerable?—Yes. It would also benefit the home trade because our home trade houses buy largely from continental houses, and everything on the continent is made according to the metric system; therefore they would have a great advantage in being able to buy under the same system under which these goods are made.

1001. Do you tell the Committee that the home trade houses in Manchester are obliged to adopt a similar sort of system, only the other way about, that when they buy in kilos and metres from French houses, say, they have to convert into English pounds and inches and feet?—Yes, just so.

1002. Can you tell us of any house that keeps clerks for that particular purpose. How is it done in the home trade houses?—No doubt they have clerks. I do not know of any personally; but it must be done in the reverse way ours is done.

1003. Do you think that your home trade houses, in dealing with continental countries, will have just the same difficulties and be handicapped

in

*Chairman*—continued.

in the same degree that you are in dealing with foreign countries which have adopted the metric system?—Not exactly, because the foreign seller is always willing to adapt himself to his markets, and when he comes here he is wise enough to sell to English people in their weights and measures, and that is one of the great difficulties, because the Englishman, as a rule, is not so willing and prepared to go to the same trouble in making his calculations for his customers. That is why the continental people have the advantage, because they do go to the trouble, and willingly, for any of their customers.

1004. But I understand you think there are home trade houses that do practically buy by the metric system and sell by the ordinary imperial system?—Certainly they have the chance of so buying, and no doubt it will be to their advantage if they do, because the extra work must be paid for, and a continental manufacturer will try to charge more if he has to go to the trouble of making the calculations.

1005. He will not make the calculations for nothing?—No.

1006. And therefore the home trader would get his goods cheaper if he were to buy by the metrical system, than he does at the present time if the French house makes the change for him?—Naturally someone must pay for it; there is a charge on the trade in making these calculations, and either the buyer or seller must pay it.

1007. Has the advantage of the metric system in regard to some of the English miscellaneous weights come before you practically in your trade?—Yes, not only as to the miscellaneous weights, but others; for instance, in Manilla, an order has been issued that all duties must be calculated on the six millimetre scale, that is the $\frac{6}{1000}$th part of a metre.

Mr. *Stevenson.*

1008. Is that to determine the fineness of the cloth?—Yes.

*Chairman.*

1009. Instead of taking it on the half-inch you have to take it on the six millimetre?—Yes, and they go so far that they want everything in kilometres, and the fineness of the goods expressed in five or six millimetre square. If you buy grey cloth, and you count it exactly, when once you have it bleached or printed or handled in any way, you will find the threads are shifted. The strain on the cloth will alter the threads, and when you put it under the glass again, you will find it comes under a different class; it does not count the number of threads which it did before. Therefore you can only count, and be certain of having their measurement when the goods are finished, and you no doubt will see how difficult it would be to calculate in the grey when you want to have a result in the finished goods.

1010. But would not that apply to any system of measurement?—Not to the same extent, because if a man bought and sold under the metric system, you would only have the one measurement, and you know from experience how much it would vary. But here you buy under one measurement, and sell under the other; you buy under the quarter-inch or half-inch square, and you sell under the five or six millimetre square, and that of course makes it much more difficult.

1011. And an error creeps in there which would be avoided if you had measured under only one system?—Yes.

1012. I do not think I need trouble you with the question of different hogsheads and gallons, that the Committee have had before. Is there any other matter as to irregularities special to your trade which you would mention?—There is one thing I should like to mention. In the new Factory Act a millowner is obliged, twice a day, or so often, to give a record of the temperature. Now, I think, when such a law is introduced, we might as well adopt with it the centigrade instead of keeping to the Fahrenheit thermometer, which has been discarded by all foreign nations. There would be no difficulty about it, they have all to buy their thermometers; and they could as easily buy one as the other, and I think it would be a step in the right direction if they bought the centigrade and got the people used to it. In the same way, I think the School Board should help us in teaching and getting the children used to knowing what a centigrade or these different measures mean.

1013. You think it is not merely in the pounds, and in the feet and inches, but also in other matters in which continental nations have agreed to take a definite unit, whereas we have adopted a separate one, and you instance the case of the thermometers?—Yes, I think all these things which are in the direction of the metric system should be pointed out as matters of interest to the children, and as a matter of knowledge. It should not be a hard-and-fast rule, but one which a teacher might put before them in his own way.

1014. Is there any other remark which you would like to make?—There is perhaps one point as to the manufacturers under the metric system. They have a great advantage in this way: In France they make or calculate their pieces 100 metres long. Those 100 metres weigh so many kilos. If a customer comes and says I want so many metres, the pieces are cut to a certain length, say, 50 or 60 metres, and it is absolutely no work to determine at once what is the weight of these smaller pieces, whilst if we did the same thing here, we should have to begin to calculate the yards and inches, pounds and ounces.

1015. Tell the Committee how that is: supposing the question were put to you with regard to inches and the ordinary length of pieces in your trade?—Where my regular make is 100 metres and 10 kilos, and a customer comes in and says, "I do not want 100 metres, I want you to make me pieces of 70 metres," I say, "All right"; and he says, "What will those weigh?" Any child would know at once it would be seven kilos.

1016. That is very simple. Now I want you to put the other case: Suppose you make a piece of 128 yards?—Supposing you make a piece of 128 yards, to make it easy, we will say it weighs 10 pounds. Then a man comes and says, "Make me 90 yards." You say, "All right." He says, "What will that weigh?" You will see what

*Chairman*—continued.

what trouble it requires to give the answer, as compared with the other system.

1017. Would that apply to yarns, too?—Yes, it applies to everything. As I say, a Frenchman determines his counts by the length in metres in the half kilo. If he has 20,000 metres in the half kilo that means twenties.

1018. What do you mean by twenties?—There it means how many hanks are required to go to the pound. We have 840 yards to the hank, and if you require 20 hanks of 840 yards to make a pound, that is called twenties. Here we make a hank of 840 yards, which is divided into seven leas of 120 yards each, or it is not divided at all, and left cross reeled, and remains 840 yards.

1019. Then, in the yarn trade, it would be a great simplification if the metric system could be introduced, would it?—Yes, except that our system is practically adopted by all the world except France.

1020. Is this simplification, which, in your opinion, would be brought about by the adoption of the metric system, in the first place, possible, and is it, in the second place, desirable, in view of that, no doubt, there would be opposition to it in that particular trade?—I think it is possible, certainly, and it is advisable in every way, with this one exception; it might be a question of convenience of keeping the English "make-up." But it would not interfere with the selling of the yarn in the metric or decimal system; we could sell according to the metric system, and even if required to keep the make-up of the yarns as they are, we could sell them as five kilos instead of eleven pounds. It is only a question whether you decide to take 840 yards to the hank, or so many thousand metres to the half kilo, but as everybody understands what twenties English means, the difficulty would certainly not be great if we adopted the decimal system.

1021. In the decimal system, would the counts which are now known as twenties and thirties, and so forth, remain the same?—Yes, they would remain the same.

1022. The difference would only be, as you have said, in the selling by the weight and length?—For goods, I can see no difficulty whatever in adopting the metric system.

1023. But you think there is a greater difficulty in the case of the yarns?—It is simply the habit of the people buying by the English "make-up;" it would be difficult to disturb; and, I think, especially English spinners, knowing the whole world have adopted their system for the make-up, would kick. They would say, "No, that does not suit us; why should you alter it when there is only one country having the metric system for yarns."

1024. What would you say to him, then?—I would say, "I will leave you your "make-up," but by-and-bye you will ask me for it yourself for your own convenience sake." I think they only want showing what it means to have the metric and decimal systems, and they will ask for it. They will be as anxious to have it as they are now disinclined to adopt it. They are bound to find out the advantage of it, and I should emphatically recommend the adoption of the decimal system, even if there is no chance of getting the metric system at present.

*Chairman*—continued.

Sir *Samuel Montagu.*

1025. Did you say troy weight was used in your trade?—It is used in this one case only: for finding out the counts of yarn; in the list which I have put before the Chairman you will find both weights used, troy and avoirdupois.

1026. With what object do you use troy weight?—I cannot tell you why. The list was in existence 30 years ago, and is in existence to-day. It is the only acknowledged list in the trade in Manchester; formerly there was on it the name of the man who brought it out, but it is not now. It states the ounces in avoirdupois, but the other weights in troy. Not that anyone understands them; the man who made it knew what he was about, no doubt.

1027. Do they divide the ounces into penny-weights and grains?—Yes.

1028. We have been told that troy weight is only used by goldsmiths and jewellers; is that so?—I think there is actual proof there that we do use it. I brought the list on purpose, because I thought it might be difficult to make gentlemen believe it was the case that two weights are used for the same purpose and in the same table.

1029. You have been in this country for 25 years; have you estimated the saving of time in the education of school children, if the metric system were introduced?—From my own experience I should say you would save, practically, the work of a whole year in your child's school life, if you take a reasonable number of years. I do not mean if you take a child away at 12 years; but taking an average and a fairly well-educated child, I think you would save one year.

1030. With regard to yarns; have you heard that the Leicester Chamber of Commerce desires that metrical numbers should be used?—I have not heard so, but I am not surprised.

1031. Internationally?—Yes, because they do a large export trade, and naturally they must feel the difficulty.

1032. Has the Manchester Chamber of Commerce taken any action in regard to the numbering of yarn in the metrical numbers?—Yes; the Manchester Chamber of Commerce have had this question before them several times, and as far back as 1852 they sent an application to Parliament to take this matter up, but especially as to the decimal system at that time. Then they approached the Education Department again in 1892, and there was a representation of the Chamber upon the deputation to the Chancellor of the Exchequer in January 1893. Practically, I should think every member of our Chamber of Commerce is in favour of the decimal system.

Mr. *Stevenson.*

1033. Do you mean decimal coinage?—Altogether.

*Chairman.*

1034. We are rather speaking of weights and measures here. Are they in favour of the decimal system as opposed to the metric system?—I daresay you would find some who would think it too difficult

*Chairman*—continued.

difficult to introduce the metric system all at once, whilst I think you would find no opposition to the adoption of the decimal system. There would be no fear with them as to the decimal system; but as regards the metric system, there would be a certain amount of fear on the part of some of the members that it might be too great a change to make in this country at once.

1035. Have they come to any resolution with regard to that matter?—It has not been before them lately. We have had before us, in our Yarn Section, an application from the Foreign Office inquiring whether we were in favour of adopting the metric system in the yarn trade, and our Committee decided that we could not recommend the adoption of the metric system for the yarn trade unless it became universally adopted; if all the nations would adopt it we said, yes, but for ourselves to do it without the others we could not recommend it.

1036. Then, do I understand that in the yarn trade the metric system is not in use by the other countries?—Practically, only by France. Some other countries buy yarns in kilos, but the "make-up" of the yarn is according to the English system.

Mr. *Stevenson.*

1037. Do you mean the standard of fineness?—Yes, to arrive at the count of the yarn, it is only in France they do it according to the metric system; they make so many thousand metres to the half kilo, whilst all other countries have the English system of 840 yards to the hank and so many hanks to the pound.

*Chairman.*

1038. Is it likely, do you think, that the other countries, having adopted our system, would be likely to change?—There have been inquiries from what I said just now; but, of course, I cannot say how far those countries would go.

Mr. *Wrightson.*

1039. What is the amount of trade between this country and France in yarns?—The amount of trade between this country and France varies very much, partly according to fashion, and partly according to the state of the markets. Recently there has been a much larger continental trade than for some time, on account of the very great fall in prices.

1040. I am not speaking of the general continental trade; I mean the trade of France?—The French trade was formerly for coarse yarns, but they spin now their own; they have started mills partly with English capital. There are only a few fine mills in France; these excepted, all the fine yarns have to be practically bought here, because there is no other supply; no other country makes them. But there are other countries which are much more important.

1041. But they use our system?—They buy by weight. All yarns which are not in the bundle are bought by weight, pure and simple.

1042. But the count is under our system, is it not?—Yes, the count is under our system.

Sir *Edward Hill.*

1043. I take it that you are yourself strongly in favour of the general adoption of the metric system?—Certainly.

1044. And also the decimal system?—Yes, the adoption of the decimal system, I think, is even more pressing than the other.

1045. And you have come to that conclusion because of its great simplicity as one reason?—Yes.

1046. And the saving of time and trouble?—And expense.

1047. And also because the system is very general, if not universally adopted, in the countries with which you do business?—With the exception of Russia, all the European countries work on the metric system. All the South American and the Central American countries work on that system, so that, practically, the whole of the trade, with the exception of the East, is under that system now.

1048. The only difficulty you see which, I think, you believe could be got over without very much trouble, is the question of counting the yarns; is that so?—Yes, I think for the present you will find very great opposition if you want to alter the way of determining the count of the yarn. If you want to adopt a different system to what we have, there would be very strong opposition in Lancashire.

1049. In your opinion, is that an opposition which would wear out?—I think it would die out very soon if they once saw the very great advantages there would be in other directions.

1050. Have you found that our extremely complicated English system, which is so well illustrated by this Table, is of great disadvantage to you, not only in buying, but also in selling?—In every way. We are handicapped in every way by this complicated system.

1051. Do you think it is a disadvantage to English trade in general?—Certainly, anything which handicaps trade must be a disadvantage, because it is either expense or risk, and whatever it is, it is always against you.

Mr. *Crombie.*

1052. You said although we Englishmen are not so expeditious in selling under the metric system to foreign customers, still the foreigner was clever enough to sell to the English merchants under the English system, and that that involved a considerable amount of trouble, and, therefore, he charged something for the trouble. In your opinion, does that charge fall upon the English buyer?—They will try to put it on the English buyer. I will not say they will refuse a bargain because of having to go to the trouble; but, in the first instance, they certainly will try to pay themselves for the expense.

1053. But do you think the English buyer pays that extra expense?—That will depend upon the competition. If there is English competition which does not allow the foreigner to put the charge on, he will not get paid for the charge. If there is no competition it makes it possible for him to realize it; he will put it on.

1054. Do you think, in most of the commodities we buy in that way, there is no competition?—I think

Mr. *Crombie*—continued.

I think there are very few cases in which there is no competition.

1055. Do you think then there are many cases in which the English buyer pays more?—It depends on which producer can produce at the lowest cost. If the foreigner is 5 per cent. below the English producer, and this expense comes to 1 per cent., he can put on that 1 per cent., and he is still 4 per cent. below; if they are level, and he puts it on, he would lose the bargain.

1056. Do you think in any case that has come under your notice you could give an instance of a foreigner manufacturing and selling to an Englishman, as compared with a Belgian actually charging more because of the difference in the weights and measures of the two countries?—No foreigner will tell you he attempts to charge you more; he does that quietly.

1057. Do you think there are such instances?—I am quite convinced that the expense of conversion is put on.

1058. Of course it must be put on somewhere, but is it put on to the individual who buys, or is it spread over the whole business?—No, I say it depends upon circumstances. If there is a chance of putting it on it will be put on. If there is danger of losing the business it will not be put on.

1059. Then with regard to counts of yarn, do you think if we were to adopt the metric system such a count of 20 is so fixed all over the world that we should still retain the old size?—If you adopted the metric system you could not retain twenties if it were not twenties. If you were to take 20 French that means 24 English in round numbers, and there would be no difficulty if you changed, to change to what you call it, because everybody would then understand what it really means, and would know so many thousand metres belong to the half kilo, and that this number would determine the count.

1060. It would be a different number, but it would be the old size, would it not?—It would be the old size under a different name.

1061. If you converted that, maintaining the same fineness into a different number, would it not have an awkward decimal?—No, the French count has no decimal, but you would have the length in the metres. They take 142 centimetres and a fraction for the circumference of their reel, and they make 700 threads to the hank.

1062. I know that the French count has no fraction?—They would have so many thousand metres according to the count.

1063. But these, the sizes, are different in France, are they not?—Yes, but if you adopted the metric system you would have the French sizes which would be adopted with it.

1064. Then would you change your size?—Yes; what is now twenty-fours would be twenties, and what is now thirty-twos would be twenty-eights.

1065. Would it be as exact as that in each case?—Of course, whichever way you take the fraction the French system, being based on the metre, would show no fraction, while ours, not being based on the metre, would show a fraction.

1066. But if you make the change, a fraction must be shown somewhere either in the name of the yarn or you must deal with the very awkward quantities, very awkward lengths and weights, must you not?—No, on the contrary, you would have so many thousand metres for each count you wanted to represent for the half kilo, and you would have absolutely no fraction.

1067. But will you get the exact size of our English twenties if you do that?—No, I say you must drop the size if you adopt the metric system.

1068. If you adopt the metric system you must depart from that well-known size, must you?—Yes, you must give up the English counts and "make-up" if you want to adopt the metric system for yarns, and that is why I am not so much in favour of doing it for yarns, because the opposition to doing it at first would be very great, and it might be left to a later stage, I think.

*Chairman.*

1069. Do I understand you can alter the name but keep the same relation as now between the length and the weight?—Yes, the yarns might continue to be reeled, and made up as now, and be sold by the kilo. We sell an 11 lb. bundle by the kilo. In all those countries which want to buy by the metric system they say, "Give us an 11 lb. bundle," and we give them the French reel only if specially ordered. In that way we make up the weight which represents the five kilos. It is only the English "make-up," which, I should say, is better left as it is at present.

1070. A man would get the same weight and thickness of yarn of a given length as he gets now, but he would buy a kilo of it instead of buying a pound of it?—Yes, that is so; where he gets a hundred hanks of twenty-fours, he would take in future 110, and instead of 10 pounds now he would take 11 pounds; he would get the same number of hanks as before, plus 10 per cent. The number of hanks divided by the count and then halved gives the kilos.

Sir *Samuel Montagu.*

1071. But it is not so exactly, is it?—It comes very near; in fact the bundles never are exact. If our yarn bundles weigh 9 lbs. 14 ozs., if they are pressed bundles, they are reckoned as 10 pounds.

*Chairman.*

1072. Probably the moisture makes that difference?—They say not, but 11 pounds, practically speaking, means 5 kilos in the yarn trade.

Mr. *Burt.*

1073. Were you in Germany when the metric system was adopted there?—I was there before it was adopted, whilst it was pending—I was there very often, and I have been there many times since.

1074. When you spoke of the ease with which the transition was made, were you speaking from personal observation?—Yes, from what I have seen myself. I have gone into shops, seen the new weights standing on the counter with the names over them, so many grammes, and over that,

Mr. *Burt*—continued.

that, say, half a pound, or a quarter of a pound, or so many ounces, and when the people came in and asked for goods under the old name the shopkeeper would say, "In future you will have to ask for so-and-so; you had better look at those," and he would show the customer what it meant; the next time that customer came, or, perhaps, six or ten times after, he would begin to ask for that thing. I have seen them look quite proud when they could come and ask for an article by the new weight.

1075. Prior to the introduction of the metric system in Germany, their system was even less uniform and more complicated than ours, I believe?—Yes. You had the ell, the Brabant ell; you had at least half a dozen, if not more, different measures of length. Then you had the pounds and ounces, which had been altered several times before the metric system was adopted; and, of course, the coinage was far worse still. Everything under the sun was practically in existence. If you went into any place and handed them a piece of gold, a louis d'or, a frederick d'or, or a ducat, or anything, it would be put in the scales and weighed, and according to how it was worn it would be said it was worth so much. You had the groschen, etc.; in fact, there was no end to it; no one to-day could tell you how many different coins there were without looking it up; they were quite as complicated as our weights are in stones.

1076. I understand you to say there would be great saving in time as regards business, a saving also in expense, and also in the teaching of the thing. You say there would be a saving on the average of about a year in a child's school time; is that so?—I should think so, in the practical education.

1077. That, of course, is on the assumption that the metric system became uniformly compulsory, and displaces the existing system?—Yes, of course. I do not mean to have the two systems side by side; I mean the one only; leave everything else, and take the one, then the saving would come in; otherwise there would be no saving.

Mr. *Stevenson.*

1078. I think you assume that the children at school would have learnt the use of the metric system before it becomes compulsory?—Yes; I have seen many a time where children have learned it, and two years after they have left school they have forgotten all about it. In Germany I noticed when the change was being made everybody became a teacher; the schoolmaster was a teacher, the shopkeeper was a teacher, and everybody had this very thing in view; the schoolmaster, the children, the trader, and everybody; it became a practical question; they knew they had to be ready when the time came, and they were ready before the time came.

1079. Meantime, during its transition, there was twice as much arithmetic instruction required; they continued to maintain the old system, and at the same time were learning the new system?—The old system got neglected, and the new system got the advantage. Any



Mr. *Stevenson*—continued.

child going to school would be taught the new system, and they would go to the shops and ask for goods under that system.

*Chairman.*

1080. They knew, did they not, after a given time it would be made compulsory?—Yes, I do not think it would be necessary, or only to a slight extent, to teach the children the old system if you made the other optional, straight away.

Mr. *Stevenson.*

1081. Do you think that in the remote parts of the country the people would not continue the present system until the very last day they were permitted to do it?—I do not think you would find it so. They would find the change difficult and strange at first, but in 12 months after you had made it optional, you would find a large number of the people even in the country districts, would ask for things under the new names. They would take pride in it.

1082. You are aware, of course, that the system was enormously more complex as to measures in Germany than ever it was in this country. In this country we never had different feet, inches, and yards, did we?—No, therefore it would be all the more simple to alter it. If you make your 36 inches into what is practically 40 inches, it would not be difficult for a woman going to a shop in future to know that she would get 10 metres where she got 11 yards; it would be easier for them to understand it here.

1083. But the necessity for an alteration is not so great here, is it?—I think I have shown you the great drawback, so far as the textile branch goes, in dealing with countries that have the metric system. If you have to make these calculations, there is a loss of time.

1084. What is the textile article most used, of which most millions of metres are exported, shirtings, or what?—No. The eastern trade has not come much under the metric system yet; we have Central America, South America, and the Continent, and therefore you would have more prints and fancy goods of every kind than the common goods.

1085. Are those goods woven in England on some definite portion of a yard?—No, you have all sorts of lengths.

1086. I am talking about widths?—You order the widths as you want them.

1087. It is just as easy, is it, to weave a width of 27 inches as 28 inches?—Yes, it is according to the looms; you have some looms which would not do, you have others which can be adapted.

1088. Taking the case of a manufacturer who is weaving cloth for the foreign country which uses the metric system, and who does not take the trouble to possess himself of a standard measure of that country, and adapt his manufacture thereto, what would you say?—He need not have a metre, because if you give him the inches he can do it according to the inches which would represent a metre.

1089. Does he do that?—No doubt he would if you asked him, but then you have the difficulty in the length as well as in the width.

 1090. I will

Mr. *Stevenson*—continued.

1090. I will deal with the length afterwards. How is the order expressed that comes from a foreign country; is it so many metres long?—So many metres long; but the width is sometimes given in English.

1091. Not so many centimetres wide?—Yes; if they give it you that way.

1092. But surely they specify the width they want, in giving the order, do they not?—Often these goods are not sold in yards, yet with the width given in inches; before you send them off you have to calculate them, and put the metre dimensions on the invoices, and declare them for the Custom-house. Of course, when you go to a manufacturer who understands metres, you may give the measurement straight away in the metres. Otherwise you make your own calculations, give the manufacturer the measurement, and he executes the order.

1093. But why should not the English manufacturer weave it to the metrical dimensions, if he wishes, as regards width?—I do not know whether you have ever been in a manufacturing district and seen the mills as they exist; you would find most of those manufacturers are not the kind of men who would go into the metric system, I think. The great number of small manufacturers could not do it.

1094. Are they small manufacturers who employ all those clerks you have spoken about?—The clerks are employed by the shippers, not by the manufacturers; the trade is practically in the hands of the shippers. All the exporting is done through the shippers; there are a very few manufacturers who sell anything themselves in the foreign countries.

1095. Then as to the length; you gave us a case of how easy it was to calculate a thing 60 metres long out of a piece that was woven 100 metres long; would it not be as easy to weave a piece 100 yards long, and if a man wanted a piece of 60 yards it could be determined by a proportionate weight?—But if you have a piece of a certain length, and you want to calculate a fraction of that total length, you will find at once you come into inches or ounces, and you have to multiply by 12 or 16, whilst in the metric system you have nothing to do but simply to shift your comma, and you have it.

1096. If a man was getting measured by a tailor in Germany for a new suit of clothes under the old system, what kind of measuring-tape would the tailor use?—He would have the ell under the old system.

1097. And divide it?—There are different kinds of ells, according to the district you went to and according to the cloth you bought.

1098. Now, I presume, he gets measured by the centimetre?—Yes.

1099. There would be a confusion in the mind of the tailor, perhaps, at first, in making the change?—They soon got over that, at least they did in Germany, and I think the tailors here would do the same.

1100. Of the quantity of the textile goods manufactured in England, what proportion is for home consumption and what proportion is for exportation?—I should not like to say without my references. I have not gone into the question of what proportion there is between the two; in fact, I do not know whether you can get any statistics for it as to textiles only.

1101. In regard to the standard of fineness of yarn, I think you said you measured off hanks of 840 yards?—Yes.

1102. If 40 of those hanks go to a pound, you call them forties, do you not?—Yes.

1103. When you ask for forties in France, does it mean the same thing as in England?—In France it means a different thing; in any other country it would mean the same as here.

1104. But you can get a ratio of length to weight by kilos and grammes, just as easy, and still keep to the 40, can you not?—But you see the French make their hank of a different length; they make theirs a thousand metres, we 840 yards. If you had the same length in both countries it would be a very simple matter.

1105. It would seem, then, that the French have adopted a different standard of numbers, as to the fineness of yarn, to all the rest of the world?—Yes, because they have based theirs on the metric system. If you take the weight only you could keep the English make-up; but if you want to put the length in also, and the French denomination, you cannot.

1106. Do not you see the number 40 is a ratio of length to weight, and the French, if they had chosen, might have had their forties determined by metre length, and kilogramme weight?—Yes, but you would not have the 1,000 metres, you would not have been able to make it according to the 1,000 metres, which they have done for each count. That determines the count; how many thousand metres there are in a given weight, and you could not get that.

1107. Then there is no sin in using 840?—I think the make up might be kept up for the present, because it is universally adopted, except in France.

1108. Then as to the standard of fineness of cloth, did you say that was half-inch square in England?—The threads are counted under a glass half or quarter-inch square.

1109. If you take a quarter-inch square, and count the threads each way, and there are 16 one way and 16 the other, what do you call that?—You call that 16 by 16.

1110. If we adopt the metric system, how should we keep our 16 by 16?—You would have the five millimetre glass, and you would give the number of threads under that five millimetre glass.

1111. Would that give 16?—You would give what you find; it would not be the same exactly.

1112. Would not that be altering the name of the fineness?—Of course it would alter it, but the cloth would not be altered. What you called before 16 by 16 you would perhaps call 15 by 15, or 18 by 18, according to how it would work out; but everybody would understand it, it would lead to no confusion.

1113. If 16 by 16 meant a certain thing one year and a different thing the next it would lead to confusion, would it not?—No, because the buyers and sellers would know what it meant under the metric system, and the retail people do not buy it in that way.

1114. Are

Mr. *Stevenson*—continued.

1114. Are many textile goods imported into this country from abroad?—Yes.

1115. Do the manufacturers of those goods take the trouble to weave their widths of cloth to suit our measurement of inches?—Any continental manufacturer will go to any trouble if he gets paid for it; if he finds a market here he will not stick at a little trouble or expense if he finds it will pay him. They are much more ready to do anything which may be a little trouble than they are here. Our manufacturers are much less willing, and much less inclined, to go out of their way than continental manufacturers are.

1116. Do you think if they were equally intelligent and enterprising here they would do more trade?—Yes.

1117. And do you think it necessary that the whole population of this country should be obliged to learn a new language of weights and measures in order that our manufacturers should be saved trouble in carrying on their business?—I do not say that; I say it is a step in the right direction, and a very important step. There are other matters, no doubt, which could be improved in this country, but I do not think that they come under this inquiry.

Mr. *Godson*

1118. Looking at the natural character of children, do you think the year that will be saved in education will be quite sufficient for the average child to get to know the new measures. Would it take an average child of 10 or 11 a year to pick up the metrical system?—Of course, the metrical system would be taught the same as this system. It is not taught in one year of school life.

1119. How long do you think it would take. How long does it take in a German school to teach the system?—In Germany, school life goes up to 14. A child must pass a certain standard at 14 before he or she can leave school. If that standard is reached it is all right, if not they must continue.

1120. Can you give me any idea how long it would take to teach a system like that?—It depends upon the intelligence and age of the child, and on the teacher; there are so many circumstances that it would be difficult to fix a time. I should say it would take a year less throughout school life; if you take all the lessons you give on English weights and measures and on the metric system, I should say you would not save much less than a year's time.

1121. Have you heard it put as high as two years?—No; I have not. I should put that as an extreme. I would sooner put it less than more.

Mr. *Godson*—continued.

1122. The Committee have heard that there is no system in use in India. Supposing they introduce the metric system, say for measurement, that would be an assistance towards a general adoption of a system, would it not?—In India, at present, under the Merchandise Marks Act, we have to give them 840 yards to the hank. All the yarns must average 840 yards, or they may be confiscated; but if India were to adopt the metric system, and we were not, it would be against us, and to the advantage of those manufacturers who use the metric system.

1123. You do not happen to know, then, that there is a system in suspense which might be applied, so far as length is concerned, to India, do you?—There is no metric system in operation at present.

1124. But supposing that at any moment (and it is at the option of the Governor General for the time being) the Governor General were to make the proper order for it to be applied, then at once it would handicap us, would it not?—It would handicap us to a very serious extent.

Mr. *Wallace.*

1125. You speak of cotton; do you know how linen is put up in Belgium and in France for the United States market?—I cannot say.

1126. You do not know how they put up their yarns in Belgium and France that are being used in Belfast at present; do you know that they conform to the Belfast system, so as to cultivate a trade there?—I could not say with any certainty.

1127. Do you know anything of the difficulties as to measuring in the relative countries?—The continental measure is much more simple.

1128. Do you know of any difficulties having arisen, and business fallen through, because of the difference?—No, I have never heard of any.

*Chairman.*

1129. Do you trade to Japan?—Yes.

1130. What system do you find there?—In Japan they take all our goods according to the English system, although in Japan they have adopted the metric system; in fact, they use both at present, but for textiles they use the English system.

1131. Are you aware that they do use the millimetre in Japan?—Yes.

1132. Did you see to-day that the millimetre was mentioned in connection with the wound which the Chinese General recently received?—Yes. I know they use both systems; but the one under which we deal with them is the English system.

Mr. FRANK DEBENHAM, called in; and Examined.

*Chairman.*

1133. You, I believe, are the head of the well-known firm of Debenham and Freebody?—Yes.

1134. You have had considerable experience both as wholesale and retail importers, and distributors?—Yes.

 1137. Have

*Chairman*—continued.

1135. What are the goods that you chiefly deal in?—In foreign goods; silks, woollens, ribbons, lace, gloves; all kinds of textiles.

1136. Where do you get your silk goods from?—Lyons, Zurich, and Crefeld, in Rheinish Prussia.

*Chairman*—continued.

1137. Have you made yourself acquainted with the difficulties which arise in your trade owing to the difference in the system of weights and measures adopted in those countries with which you deal, and our own?—Yes.

1138. Will you tell the Committee the principal difficulties which meet the English traders, such as you are, in consequence of this difference of system?—The English buyer goes into any of these foreign markets, and when quotations are made, not only in francs, but also in metres, he has to go through a mental process of conversion in his own mind, and to the English buyer that is an immense drawback.

1139. When you are dealing with a house in Lyons, for example, do you give your orders in metres and kilos (if you happen to be dealing with weight), or do you give your orders in yards and pounds?—The custom of giving orders in yards and pounds, as the case may be, has grown up somewhat of later years, but still the older practice of quotations in metres is far more general still. The habit of giving it in yards is practically a concession to the difficulties of the English buyer in making the conversion himself. In Switzerland and Germany the practice of giving quotations in yards is growing very much, but it is simply to save the English buyer trouble.

1140. Do you agree with the former witness, that if the Swiss, or German, or French manufacturers quoted to you in pounds or yards, whilst he himself manufactures and calculates in metres and kilos, he charges something for the trouble he has in making the conversion for your benefit?—I have no doubt. I thought the remark of the previous witness was so striking that I made a note of it. Any kind of foreign manufacturer will take any amount of trouble if he is paid for it, and he is paid for it, no doubt.

1141. On whom does the extra cost fall?—On the buyer, obviously.

Mr. *Godson.*

1142. He would give himself the benefit of the turn of the market, then?—Frequently.

*Chairman.*

1143. And this would not occur, would it, if the systems were made identical?—No.

1144. Is there any chance of the German, or French, or Swiss people adopting our plan?—Not the slightest. I might mention one insuperable difficulty. Nearly all textile goods are folded after they are completed and shipped, and the folds are necessarily in metres. They are made for general consumption, home or foreign, as the case may be. That is an additional complication. When those goods reach the warehouse in England in metre folds, or fractions of metre folds, in re-measuring them or distributing them the conversion into yards and inches has to be made, which is a fruitful source of irregularity and incorrectness.

1145. And also causes, in some degree, damage to the goods in being re-folded, I suppose?—Well, the older system, at any rate in the wholesale trade, of measuring by the yard is almost obsolete. It is done by counting the folds, and taking count of the fractions; therefore, the folds being in metres, or fractions of metres, the calculation has to be made at the warehouse at the time.

*Chairman*—continued.

1146. Then you would agree with the former witness, would you, in saying that there is to you, for example, who buy in the metric system, and sell according to the imperial weight, a difficulty and a drawback?—Decidedly.

1147. And it is a matter which you and your trade feel handicapped in as against a French producer?—Certainly.

1148. Have you anything to say with regard to the variety and complexity of the calculations in your particular trade which are incidental to this necessary conversion of the one system into the other?—The complexity arises a good deal from the difference in the prices—in the money systems of the two countries.

1149. Into that we do not propose to go at the present moment?—But the system varying, decimals obtains largely, particularly in the Lyons Market, and all that has to be calculated to arrive at the net cost to the buyer in his warehouse at home. All that adds materially to the complication, so much so that it is the common practice in the trade for all buyers who go abroad, instead of working out these conversions themselves, to use tables and books. I have brought one here as a specimen. That, from a practical point of view, is very bad for a buyer.

1150. Why is it bad for a buyer?—In this sense, that a buyer ought to have an instantaneous appreciation of the price or value as the quotation is given to him. A quotation of a silk is given him at five francs a metre, subject to 15 per cent., and if he has to calculate in his own mind for every quotation what that means per yard in his warehouse it is a terribly lengthy process.

1151. You are speaking now, are you, not of the retail buyer who comes to your shop, but of the buyer from the wholesale dealer?—I am speaking of the buyer who goes to Lyons and Zurich to buy. The practice is to go into the markets to buy, at any rate as to the larger buyers, and as he cannot make the calculation, it being a too lengthy process, he has a book of tables, and every quotation he gets he has to turn to the book and see what it is. It destroys that spontaneity of appreciation of value which every buyer ought to have. A man may see perhaps 50 pieces of goods in five minutes, and ought to know as he touches them what their value is at home. It is a complication, and a serious one.

1152. Do you feel that to be a serious matter?—Yes, very much so.

1153. What have you to say with regard to the case of the trader who exports to foreign countries where the decimal and metric systems obtain?—There the whole process has to be repeated, and the difficulties are repeated. For instance, from my own house, we distribute a great many of the goods that we buy in Switzerland, France, and Germany; in France and Switzerland again from our warehouse in London. It

*Chairman*—continued.

It is sold back again in the country. When the goods are in the warehouse in London they are in yards, and necessarily in sterling prices. Then, when they are sold abroad by travellers or to clients who come over here, they have to be sold again in metres and francs, or marks, as the case may be, so that the whole process of conversion as to prices and measurement has to be repeated.

1154. That again, I suppose, falls as an additional load on the retail purchaser?—Perhaps it does. No one does anything for nothing in business, and it has to be paid for.

1155. Independently of the variation or the increase in cost, which it is evident there must be, it is a matter of difficulty to you as a trader, is it not?—Certainly.

1156. Do you think there is anything in the suggestion that the yard is too long a measure for your purposes sometimes, and that the decimal portions of a metre would come more conveniently to your trade?—The easier divisibility of the metre is a great point. For practical purposes, in selling you cannot take a lower fraction of a yard than a 16th, whereas it is equally easy with the decimal and metrical systems to take the centimetre, the 100th part of a metre, as the minimum fraction.

1157. In your trade, do these small measurements occur frequently?—Yes, in valuable goods, certainly.

1158. Are there any other inconveniences which you feel in your trade besides those which you have mentioned?—No, I do not know any of great importance. Where there is a difference the inconvenience arises from the difference, and that comes in in a thousand ways. I noticed the last witness was asked a question as to the case of a tailor measuring for a coat. It is a very common thing to have the composition of the details of a lady's dress, we will say, sent over from France in metres and centimetres. Now, for the average dressmaker in London to receive details of that kind in metres and have to convert them into yards, fractions of yards, and fractions of inches, sometimes is very complicated and awkward.

1159. That being the case, what do you say with regard to the retail trader; do you think that the adoption of the metric system would be received with a great deal of opposition here?—On the part of the public, do you mean?

1160. Yes, on the part of the public, both as to the retail buyer and the retail distributor?—I do not think it would, and I think there is a proof it would not from the fact that a great deal of business is done with the retail distributing houses in Paris through the post. There are many purchases made, particularly from London. Ladies send over to these large places in Paris for patterns of goods of one kind and another, by post, and the prices are always quoted in metres and centimetres, and in francs. I know a good many ladies who experience no difficulty in realising what the relative price and value is.

1161. Perhaps your trade deals with what we might be allowed to call the more intelligent part of the community, and they would not experience difficulty?—Perhaps it does; it is not a difficult matter; that is the point.

*Chairman*—continued.

1162. Do you think, among the poorer classes, the difficulty would be more keenly felt?—No doubt. Then they are not so much interested in the foreign goods which are sold, some of the better class of textiles which are made abroad, to any extent; but they would probably adapt themselves to that, as they would to any other system taught in public schools. I believe it is true that in Germany the transition was made with comparatively no difficulty.

1163. Supposing you deal with a Manchester or Bradford house, and buy their goods in yards, do you think there would be much objection on the part of these manufacturers to deal with you in metres and kilogrammes?—Not the least. As a matter of fact, now a manufacturer of silk goods will make up his goods in folds of metres and fractions of metres if they are so ordered, and occasionally they are so ordered for export purposes. I think the manufacturers would hail such a thing with satisfaction.

1164. Is it your opinion, also, that the general public would gain by the adoption of a system so simple as (independently altogether of the international view of the question) the metric system?—I think so, certainly.

1165. Would you give a time of probation?—I should think so, a moderate time.

1166. A couple of years?—Yes, at the outside, I should think.

1167. Would you make it optional for a couple of years, and then make it compulsory?—Yes, I would; it is, I believe, permissive now.

1168. It is permissive, but not for the purpose of trade; it is for the purpose of manufacture?—I thought it was permissible to sell your goods in metres, if you can get the public to buy them in metres. I was reading an article some time ago in which that was distinctly suggested.

1169. Then, in general, you are in favour of the adoption of the metrical system?—Certainly. I might say it is partially adopted now. I know wholesale houses in the trade who make the conversion from metres into yards on their invoices.

1170. But they cannot legally weigh in kilogrammes, or measure in metres; they cannot use the metrical weights and measures in their business. If you were asked to measure out such a number of metres, to be legal you would have to do it in yards and calculate the length in metres, would you not?—I was under the impression that it was permitted, but I have no doubt you are right. I thought it was permitted to sell in metres, if you could get anyone to buy in metres, wholesale or retail.

Sir *Samuel Montagu.*

1171. The Committee have been told that the opposition to the proposed change into the metrical system would come from small shopkeepers. Have you any experience, or have you talked with any of the small drapers, and ascertained whether they think they would experience much difficulty in making the change?—No. I cannot say I have; but even some of the smaller drapers are in the habit of buying in France, and they

Sir *Samuel Montagu*—continued.

they must be to a certain extent accustomed to the system. I should not think there would be much opposition from them.

1172. Supposing one of the labouring classes were to go into a shop and ask for a metre of something, and was told that it was somewhat longer than the yard, do you think there would be any difficulty in getting him to take it?—I could only give a speculative opinion, but I should think, having learned the system in the schools, the rising generation would offer no objection to it.

1173. Do you think they would appreciate the fact that the metre is longer than the yard, and that the kilo is heavier than the two pounds?—I should think so. We are not supposed to be a nimble-minded people, but I think we should soon catch on.

Mr. *Stewart Wallace.*

1174. In practice, do you not find it impossible to rely on the ordinary dressmaker making the change from one system to the other, has it not to be done by a superior mind, and given to the English dressmaker in figures before she can set to work?—The illustration I gave does not come within the scope of the dressmaker's business as much as it does the dealers. Frequently the textile goods are made up by the manufacturer to the order of the dealer in special lengths for special kinds of costumes. They are made up and sold in an intermediate state, but of the exact length that is required; and it is those cases where the dimensions are calculated abroad in metres and centimetres, naturally, and the process of conversion into yards and inches has to be made generally by the wholesale dealer rather than by the dressmaker. But I think the dressmaker who goes to Paris for her models, and such like, would know that.

1175. But would it not be the case that the average dressmaker could not do it herself, and that it would have to be done by persons in a superior position in the office?—No doubt an average dressmaker could not do it.

Mr. *Wrightson.*

1176. Would the amount of trade which would be affected by the change form a large portion of your business?—In my particular business it would; we are larger dealers in foreign made goods than in home-made goods. The value of the import of foreign silks is enormous; it is put down at something like 11,000,000*l.* a year.

1177. Is that all dealt with on the metric system?—Yes.

Sir *Edward Hill.*

1178. Your business has afforded you a very large experience, I may take it, both in the wholesale and retail branches?—Yes.

1179. In your opinion, would a change to the metrical or decimal system be of advantage to both those branches of business?—Most decidedly. I might say, in connection with our decimal association, I had occasion to elicit an expression of opinion from some traders in London, and particularly in the West End, and I am quite sure that the opinion is unanimous on the point. There is a question as to the inconvenience it might cause for the moment, but there can be no possible question as to the advantages if once the system were adopted.

Sir *Edward Hill*—continued.

1180. You have a very large number of assistants, have you not?—Yes.

1181. And you do not fancy they would have any difficulty in picking it up?—No, not at all; they have to be familiar with it now.

1182. You also have a very large number of customers, no doubt, of various kinds, though probably most of them, as the Chairman has said, are of the intelligent class. Do you think there would be any difficulty as to them?—I do not think so.

1183. As regards the poorer classes, the classes who are supposed, perhaps wrongly, to have lesser intelligence, does your experience lead you to suppose that there will be any greater difficulty with those classes in England than has been experienced in other countries, such as Germany, where old measures have become obsolete, and new measures introduced?—It is only a matter of opinion, but I think the experience of the results in foreign countries of the change of system is not without its value on that point. The old weights and measures still linger in France to-day, particularly in the South, and even in Paris you may buy grapes at so much the pound. In Belgium, and the more eastern countries, it is still more so. Some of the leading articles of Belgium manufacture are still sold in ells, and also by the old florin. For instance, to mention one article, that of Valenciennes lace, in the country district where this Valenciennes lace is produced, it is sold in florins and sols, and sold by the ell. If you go to Brussels, where presumably the population is more advanced, there you buy the lace in francs, and by the metre, and I expect that is the case in all countries which have changed from one system to the other.

1184. But you do not anticipate, do you, after giving it two years of probation, that there would be any material difficulty in any quarter?—Not in adopting the new system. It might take centuries to get rid of the old system.

1185. And you do not think a change would create any great disturbance in the retail or smaller transactions?—I do not think so; the greater simplicity of the decimal and metrical systems is such that it is so easily picked up.

Mr. *Stevenson.*

1186. You mentioned gloves, did you not?—Yes.

1187. Are they always made up in dozens?—Yes.

1188. The decimal system does not apply there, does it?—No, only as regards the price.

1189. Are not the sizes of gloves determined by certain numbers?—Yes.

1190. Is that system of numbers general in France and England?—There is not a uniform system. There are a great many systems upon which gloves are cut.

Mr. *Godson.*

1191. It varies a great deal, does it not?—Yes, very much. The system in Grenoble, which is the principal seat of the French glove manufacture, is more or less uniform.

1192. Is

Mr. *Stevenson.*

1192. Is it founded on old French measurements, or on the modern measurements?—It is always described in modern measurements.

1193. Are certain ribbons woven to a standard of an inch and a half, or standards of that kind?—They are made any number of widths. Ribbons, as a rule, are made on wide looms in strips and bands, the number of bands varying with the widths.

1194. Then, I suppose, there are different prices in accordance with different widths, are there not?—Certainly.

1195. And in England these widths are expressed by inches, I presume?—No, they are expressed by what are called "lines"; it depends upon the threads in the warp.

1196. A line does not mean, in that case, a twelfth part of an inch, does it?—It is too fractional to describe. They are in fractions of centimetres, or fractions of inches, so they are called lines, 13 lines and 20 lines.

1197. Would 20 lines of English ribbon mean a definite number of inches, or parts of an inch?—The older system of inches is still retained by the English manufacturers, but they perfectly well understand how many lines go to an inch; they are very familiar with the foreign system.

1198. Then, to introduce the metric system would, of course, lead to some confusion, at first, in describing the width of a ribbon?—It would hardly apply. There would be no alteration really.

1199. I mean it would not be millimetres in that case, would it?—No, and the question of width does not enter into the dealings so much. It is the description really which is recognised. The goods are not sold by the width; they are sold by the length.

1200. My point was that these expressions as to width and weight are not only matters for price, but are matters like a specification of the nature of the article, and we must face, in any change of this kind, not only the commercial use of these units, but their use as expressing shape, width, and weight?—Yes, quite so. I see the point, and it is an important one. Here is rather an interesting instance of how old habits in these matters are retained. The Swiss silk manufacturers, in describing their widths, still describe them by the "pouce" or inch, or the fraction of the pouce or inch, whereas the Lyons manufacturer will describe his in centimetres, although both will sell by the metre.

Mr. *Crombie.*

1201. You said that in France, and some of those countries in which the system has been changed, the old measures still linger now?—Yes.

1202. Do you think two years would be a sufficient time for probation for even the poorer people in London to learn the new system?—I think it would be ample to learn the new system, but not to drive out the old.

1203. But do you mean by that you would be prepared to make it penal, at the end of two years, to use the old system?—No, I would not make it penal at all; I would let them run together.

1204. Invariably, would you allow two systems to exist?—Yes, as they do in Belgium and France to-day.

Mr. *Crombie*—continued.

1205. You are aware, are you not, at present it is penal to use any other than our established system; one can be punished for using the metric system in trade; at present it is a breach of the law, is it not, to do so?—I did not know it. I will assume it is so.

1206. Would you be prepared, two years after adopting the system, to make the same law apply to the metric system; that is to say, that any person using the old system should be punished for doing so?—No, I would not indeed. It is not penal in France to use the old system.

1207. You said that the great advantage of adopting the metric system would really be that you would be immediately able to appreciate the price of foreign goods without a calculation?—Yes.

1208. Do you think you would do that if we adopted the metric system of measures and weights, but not the decimal system of coinage?—Of course, the two ought to be adopted together.

1209. You do not think the benefit would be obtained, do you, until we had adopted both?—Quite so.

Sir *Samuel Montagu.*

1210. You said that two years would be sufficient time to make it permissive; what would you do at the end of the time. Compulsion abroad means, does it not, some penalty for using the old system?—I do not think it does. It is the greater convenience of the newer system which is the thing.

1211. Are you not aware that in France, Belgium, and Germany, and on the Continent generally, that a person can be fined for using different weights and measures?—No, I was not aware of it at all. I know that you can buy goods under the old systems.

Mr. *Stevenson.*

1212. Can you buy them over the counter?—You can buy them in the street, at any rate. In Belgium you can buy them over the counter, and they are invoiced in the old moneys and under the old system.

*Chairman.*

1213. What is the difference between compulsion and non-compulsion and tolerance, unless there is some power of enforcing compulsion?—How do you get the recognition, you mean?

1214. Yes?—I suppose by the Government and the larger traders adopting it in their transactions.

1215. That is not compulsion, is it?—No.

1216. In fact, you do not propose to make it compulsory, I understand, because compulsion implies something which follows?—It does. I certainly would not carry it to the point of a penalty. All through in every department of trade, I fancy, it would be adopted almost immediately.

1217. Suppose you put on a nominal fine?—You might put on a nominal fine and be very tolerant to the country districts.

1218. Should we receive the same information that

*Chairman*—continued.

that you have given us if we were to apply to other large houses in your trade in the City or in the metropolis, such as Marshall and Snelgrove's, or Shoolbred's; do you think they would agree with you in the main?—I feel sure they would.

1219. Have you ever talked to any of them on the matter?—Yes.

1220. You can tell us, can you, that the opinion that you hold is not an unique one?—My impression is that it is the contrary. I cannot imagine anyone resisting the greater convenience of the system.

Mr. *Godson.*

1221. As to compulsion, I take it you think, if the great houses started a metrical system, and the Customs and Excise would not accept anything but the metrical system, in a very short time that would create the compulsion?—Exactly.

1222. But would the dealers be able to compel the customers to accept the metric system?—I think the customers would accept pretty much what the larger dealers imposed. If it were a question of going from a simple system to a complicated system it would not apply, of course, but the decimal system throughout is so simple and so easily grasped that I cannot imagine its not taking in this country. Already in America it is being adopted.

Mr. *Stevenson.*

1223. To what extent in America has it been adopted?—Of course their money system is largely a decimal system, and they are getting quite accustomed to using metres in some departments of trade.

*Chairman.*

1224. When you say you did not know that there was any penalty attached to the use of illegal weights and measures on the Continent, you do not speak positively on that matter, I presume?—No, excepting that I know you can buy under the old system. I can produce any quantity of invoices made out for Valenciennes lace.

1225. Probably that might apply to their dealing with a foreigner or an Englishman adopting our weights, and might not apply to the trade between themselves?—Yes, it is peculiar to the trade, to that particular manufacture. I cannot speak as to the question of the use of the older system.

*Chairman*—continued.

1226. Do I understand that they send you the weights in their old measure, or in our pounds and ounces and inches?—No, in their old measure, adopting the old Flemish ell and the old coinage; the old money system.

Sir *Samuel Montagu.*

1227. What money system?—Florins and sols.

1228. In Belgium?—Particularly in connection with the lace.

*Chairman.*

1229. Do you mean the Dutch florin?—Yes; I suppose they were really a survival of the old Spanish florin. I would not like to say too positively what is really the state of things to-day, for I should have to go back at least five years, but I have no reason to think it is altered to-day.

Mr. *Stewart Wallace.*

1230. Will a Belgian shopkeeper sell to a Belgian by the old system; do you know of your own knowledge that he will sell this particular article to a Belgian by the old system?—I cannot speak positively of what takes place to-day; I can of what took place five or ten years ago. It must be so. Taking the article of Valenciennes lace, the people in the older towns, who sell to the English or American or foreign dealer are collectors. These lengths of lace are made by the poor people on their pillows over a very large district indeed, and their payment is reckoned in the old coinage, or they were.

Sir *Samuel Montagu.*

1231. There is no coinage in Belgium but the franc, is there?—No, but the lace makers calculate their wages according to the old standards, but are paid in the only legal coins, viz., francs and centimes.

1232. I think you are quite mistaken altogether?—All I can say is, then, the system must have changed within the last five or ten years.

Mr. *Crombie.*

1233. Do you think that they use a measure of an ell; do they use a standard of an ell to measure the Valenciennes lace, or do they use the metre measures, and add so much on to make the ell?—No, they use the ell, and convert it into the metre.

1234. They use the standard ell, do they, to measure the lace?—Yes.

*Tuesday, 2nd April* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Sir Henry Roscoe. | Mr. Godson. |
| Sir John Barran. | Sir Samuel Montagu. |
| Mr. Burt. | Mr. Jasper More. |

SIR HENRY ROSCOE IN THE CHAIR.

Captain H. R. SANKEY, called in; and Examined.

*Chairman.*

1235. YOU are a Captain in the Royal Engineers, are you not?—I was. I have retired from the corps.

1236. You are now one of the directors of Willans and Robinson, Limited, the engineers at Thames Ditton, are you not?—Yes.

1237. I believe your firm has adopted the metric system of measures?—About two years ago we adopted it.

1238. What was the reason that you changed your measures from the imperial yard, an inch to the metre, and its component parts?—For some little time previous to that, we had been in many cases using decimal divisions of the inch for certain dimensions; for instance, we use thousandths of inches for what we call manufacturing limits and also for clearances. In all calculations we have been accustomed to work to decimals. For instance, all the areas of cylinders, in calculating the horse power, were worked out in inches and decimals of the square inch. We had of course the advantage of working to decimals in that respect. About two years ago we had occasion to enter into negotiations with a firm of engine builders in Belgium, and in connection with the license we gave them for making the engines it was necessary to redraw the engines to metric measurements. They suggested to us how important it would be if all the parts they made were exactly interchangeable with those we made at Thames Ditton, so that in the event of our wanting certain parts they could supply them to us, and, *vice versâ*, we could supply them with any parts they wanted. We went very carefully into the question, and the first thing we did was to inquire of our works' manager whether he thought there would be any very great disadvantage in introducing the metric system. He was so instantly in favour of doing so, that, although personally I had a great wish to introduce the metric system, I had to put myself so to speak in opposition, argue against him, and against myself, for fear that we perhaps might be making a mistake, unless the question was thoroughly well threshed out.

1239. Then I understand your first arrangement was found to be incomplete, was it?—It had an advantage up to a certain point, it had the advantage of being a decimally divided scale, but there the advantage ceased.

*Chairman*—continued.

1240. What was the disadvantage in the decimal divisions of the inch?—There is no disadvantage in the decimal division of the inch as a decimal division. It does not matter what the unit of length is in that respect.

1241. But as against the millimetre, I mean?—The main disadvantage was that we would not be able to work interchangeably with our foreign manufacturers; I may perhaps add in that respect, before we actually commenced negotiations with them, we sold some engines in Holland, and our Dutch agent,—and I believe Holland is one of the places where English machinery is most welcome,—wrote bitter letters to us saying that he could not get any orders until all the dimensions were translated into millimetres. I do not mean the working dimensions, but what may be called "customers" dimensions, the length and height, and certain other dimensions of that kind. He had to translate those, and in view of that we issued a new circular in which our older line of engine dimensions were mentioned both in millimetres and English dimensions.

1242. That you carry on to some extent still, do you not?—That we carry on to some extent still, because we have not given up the manufacture of the older line of engines.

1243. Is your trade chiefly a foreign trade?—At present our trade is chiefly an English trade, but the foreign trade is largely developing.

1244. Is it especially with regard to the foreign trade that you find it advantageous to adopt the metric system?—Most certainly.

1245. Do you find, on the other hand, any objection raised by English manufacturers or English customers of yours if you deal with them in the metric system?—No, we have had no difficulty in that respect. We have sold many of these new type of engines in England, and there has been no difficulty at all in that way. In fact I may go even further than that; we are so very busy just now that we have had to put out a lot of work to other manufacturers for some large engines with all the dimensions in millimetres, and there has not been a word of complaint from any of them in working to millimetres. We have given out orders for these different parts because we have been unable to do it ourselves.

*Chairman*—continued.

1246. To other makers in England?—Yes.

1247. And have you employed the metric system with them?—Yes.

1248. What do they say about it?—They have not complained; they have worked to it without any objection whatever.

1249. Do you think that the system which you have described as an interchangeable one is one which is of general importance for engine-making. I mean, do you think other manufacturers would feel it desirable that the system of interchangeable parts should be adopted?—I think we carry out the system of interchangeable parts to a greater extent than most manufacturers, and it is probable from that point of view it would affect us more than it would others.

1250. What class of engines do you make?—They are high-speed engines.

1251. And high power?—All sorts of powers. The smallest are about 10 horse-power, or, rather, 27 is the smallest we build now; the biggest we have built is 750 horse-power.

1252. They are not marine engines, are they? They are not marine engines.

1253. Do you make any other class of goods except engines?—We have just started making boilers, and that, again, is dimensioned on the metric system. They are made according to a French invention, and we have got drawings from France with all the dimensions in millimetres; there is no difficulty at all; we simply trace them and put in the words in English

1254. A new class of boilers?—A new class of boilers.

1255. Have you found any difficulty with your workmen in that respect?—Absolutely none.

1256. Do they adopt it and see the advantage of the system?—I should say so. In fact, in connection with my coming here this afternoon I asked four or five of our men privately (not through the works manager) what they thought of it, and there was not a dissentient voice among them. They all agreed at once that the millimetres were very much easier to work to than the English measurements. In this connection I sent a lot of questions to the different heads of our departments about a year ago, which I will put in if you like. For instance, I sent these questions to Mr. Wilson, who is the head of our drawing office. The first question was, "Have any difficulties arisen in getting the draughtsmen to change over from the English to metric measures?"

1257. Were those questions sent out soon after you adopted the system?—About nine months afterwards. It is a little over a year ago; I could give the exact date, but probably that is near enough. His answer is: "No difficulty whatever, only a little inconvenience was felt at first." Then the next question is: "Have any serious mistakes been made in the drawings in consequence of the change? (a) None; and very few minor mistakes directly due to the change in measurements." Then: "Do the draughtsmen show any preference for one system over the other? (a) They are now practically unanimous in favour of metric measurements." Then the next question is: "Do you consider the experience at Thames Ditton is applicable to other drawing offices? (a) For similar drawing offices, *i.e.*, engine, machine, tool, and such like drawing offices, yes." He can hardly answer for others, of course. Then Question 2 is, "Do you consider that the metric system is easier to design with, and do you consider that there are any advantages in checking the drawings, and in reading the dimensions? (a) Yes, in each instance. The only drawback is through having to bring in Whitworth threads, gas threads, &c., and angle bars, plates, and such like, which are made to inches." That is a drawback which is bound to exist until metric measurements are adopted. I have examples here illustrating some of those points, first of all with regard to the clearness of the drawings. This is a drawing of a cylinder according to the metric system, and underneath there is a drawing of another cylinder of nearly the same size designed to English measurements.

*Chairman*—continued.

1258. Will you point out the difference between the two drawings?—The drawings are nearly identical. There is some slight difference in the design owing to new improvements, but if you take the dimensions of the depth of the cylinder from *that* line to *this*, it is figured 10 8ths + 3 1/2nd; in the millimetre dimension it is figured simply 241; here is the thickness of wall, which is 8ths + 3 1/2nd; *here* it is figured 25 millimetres. Then there is another point illustrated here. In checking these drawings it is necessary to add up all these dimensions and make up the total height and check them against the overall dimensions *here*. I have had that run out in a tabular form to show you the difference.

| ENGLISH MEASUREMENTS. | | | | | | METRIC MEASUREMENTS. |
|---|---|---|---|---|---|---|
| Feet. | Inches. | Fractions. | | | | Millimetres. |
| – | 10 | – | 8 | – | 3 1/2 | 241 |
| – | – | – | – | 2 16 | 3 1/2 | 16 |
| – | 1 | – | 1 8 | – | – | 24 |
| – | 4 | – | – | – | – | 197 |
| 1 | 4 | 1/2 | – | – | – | 478 |
| 1 | 4 | – | 1 8 | Check dimensions. | | 470 8 |
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In one case you have to add those up to fractions, and bring them down to a common denominator. In the metric system it is a simple sum in addition in millimetres.

[*The Witness further explained the drawings.*]

1259. You do not go below the millimetre, do you?—No, because the millimetre is so small a dimension that there is no necessity except in one or two cases.

1260. Then the adoption of the millimetre scale for your designing engines is very much more simple, and, therefore, of course much less liable to error?—Yes.

Sir *John Barran.*

1261. And it is more expeditious, is it not?—Yes, it is more expeditious. I have another point on the question of error. I have here a case which occurred. It was only a small matter, but it cost us 5*l.* to put it right.

*Chairman.*

1262. Do you mean a case in which an error was made owing to the complexity of measurement

*Chairman*—continued.

ment by inches?—It is an error which perhaps somewhat corresponds with the error which is often mentioned with regard to decimals, about the shifting of the decimal point. In these drawings you see no decimal point, and that the criticism does not really apply, still sometimes one does have tenths of millimetres. Here is the case with regard to English measurements. We were putting some engines down at the General Post Office in St. Martin's-le-Grand, and this was a case of an exhaust pipe in connection with them which had to be connected to a valve. The width across the flange as shown by the drawing is 13 inches, which is the usual width for a flange of a seven-inch pipe. One flange is properly figured 13″; but somehow or other, in the case of the other flange, a tick got put after the 1 (thus: 1′ 3″), making one foot three inches, and the mistake was never discovered until the valve arrived at the General Post Office, and when the men tried to connect the valve to the pipe they could not do so. As it happened, the flange came up against a part of the engine, and we had to take the valve, put it into a lathe, and have the flange reduced to 13 inches diameter.

1263. That error, then, occurred, did it, because you were using feet and inches, and would not have occurred if you had had to put it down in millimetres?—It could not have occurred in millimetres. It would have been impossible. I believe that some manufacturers make a rule that all dimensions up to 24 inches are to be figured in inches, so as to get over this difficulty, which apparently many people had discovered before. But you only put the difficulty one step off; when you get beyond 24 inches you are as badly off as ever, because, compare 22″ and 2′ 2″, two feet two might be read as 22 inches.

1264. But still, if you adopted the metric system, and had to give the length in metres, you would have to use the decimals for the decimetre, the centimetre, and the millimetre, would you not?—I might illustrate that point in this way: taking a flange of 13 inches, the corresponding measurement for that would be about 350 millimetres. Suppose we figure that in centimetres, and put 35 centimetres, and supposing by some mistake the draughtsman put 3·5, no one would order the flange to be 3·5, because he would know perfectly well that the valve flange could not be of that size; nor could it be 350 centimetres either.

1265. In other instances would not the decimal point be needed: supposing you had a pipe to make of a certain length; you measured it at something less than a given number of metres, and you had to have a decimal point showing the number of decimetres or centimetres?—Supposing we had a long pipe, measuring, say, three metres, that that had been figured 3,000 millimetres, we will say, and one might possibly have forgotten the 0 and made it 300, the difference in dimension is so enormous that one would notice it at once.

1266. What I want to know is, whether you can or cannot in your measurements do without a decimal point in the use of the metric system?—We can for engine work, because we figure 0.55.

*Chairman*—continued.

everything up in millimetres except a very few dimensions which are the clearance dimensions, and which by their very appearance cannot lead to a mistake.

1267. Then you have no difficulty, have you, in the making of gauges after your initial step?—There is no difficulty in making gauges. I have brought a couple of gauges here to show you; there is no difference between them except in size. This is a gauge we have had in use for some little time of $\frac{5}{16}$ inch, and the other is a new one of 25 millimetres.

[*The Witness produced two specimens.*]

Sir *John Barran.*

1268. Where was that made?—We made it ourselves.

*Chairman.*

1269. Do you find that the making of dimensions by the millimetre is easier than by the old method?—There is no difference in that way, because they are made by comparison in measuring machines fitted with micrometre heads: one is divided into $\frac{1}{100}$ths of inches and the other $\frac{1}{100}$ths of millimetres, and there is no more difficulty one way or the other.

1270. Are there any other remarks you would like to make?—There are one or two more, if I may be allowed. Another question I asked our head draughtsman was this: "What is your own opinion, from a practical point of view, of the metrical system?" The answer he gave me was, "Distinctly favourable. There are little more than half the number of figures required to express a dimension" (that is, taking into account all these fractions), "there is no chance of a doubt, much less a mistake, as to whether a dimension should be read 14 inches or 1 foot 4 inches if carelessly written (14″ or 1′4″). Figures being fewer and ticks and hyphens being abolished, the time in calculating and writing down a dimension is lessened, and the chance of error lessened; thus, in my opinion, the system is conducive to expedition and accuracy. Besides, the drawing, when finished, is clearer, the outlines not being so much obscured by figures."

1271. Are those all the questions you asked your draughtsman?—I think those are perhaps all that would be of interest. I have put the same questions to other members of our staff, and their answers are identical, except that they are in different words.

1272. Then you did not find any one of your workmen who objected, did you?—No, on the contrary, they all approved of it.

1273. Can you tell the Committee whether any other of the great engineering firms have, like yourselves, adopted this system?—I believe Nordenfelt's and the Maxim Gun Factory work in millimetres.

1274. But it is not common yet in engineering works, is it?—No, I am sorry to say it is not. I do not think it is.

1275. But you can see no reason why, if you find it advantageous, it should not be also advantageous to others, can you?—No, I can see no reason whatever. We are probably as particular, if not more particular, than most people about accuracy, and no doubt that is one reason why we have adopted the millimetre. It has a much

*Chairman*—continued.

much more accurate sound about it, and I think it induces accuracy. Our people talk about a millimetre now in much the same way as one talks about an inch. I might perhaps say upon that, that at a cricket match shortly after we adopted the metric system, when a ball went very near the wicket, one of the men said it missed the wicket by half a millimetre.

1276. Then you do not find the use of the word is a drawback, do you?—No, none whatever. They talk quite freely about it now.

1277. Do they talk of a millimetre as they formerly talked of an inch?—Yes.

1278. They do not mind its being a little longer word than they have been accustomed to, do they?—No.

1279. You have heard, I suppose, that the late Professor Rankin used to sing a song about a two-foot rule, that the Englishman would never waver from his two-foot rule; you do not, I understand, think that is a fact at the present time, and that the Englishman shews a disinclination to adopt the millimetre system as against the two-foot rule?—I think there may be a little patriotism about it, but beyond that I do not know that there is anything against it.

Sir *Samuel Montagu.*

1280. Have you any record of losing any foreign orders on account of the difficulty of executing those orders according to metric measurements?—We have no record of that kind, because, before we actually commenced to do much in foreign work, we had already taken the precaution of figuring our tender drawings in millimetres.

Mr. *Godson.*

1281. Your Dutch agent never made any such complaint, did he?—No, because we immediately took the hint, as referred to under Question No. 1241.

Sir *John Barran.*

1282. What kind of engines do you make; are they all stationary engines?—Yes.

1283. Are they used for any particular purpose?—At the present time they are mostly used for driving dynamos; in fact, the electric light of this building is obtained from Willans engines.

Mr. *Godson.*

1284. I understand you found your men had not the slightest difficulty in adapting themselves almost immediately to the new system?—Not after the first few days. I asked that very question of the head of our toolroom, and he said it was a little awkward for a time. I said, "About how long?" and he said "Two days."

1285. And, as far as you know, these workmen had nothing to do with the metric system before, had they?—Nothing.

Mr. *Jasper More.*

1286. Your experience has extended only to skilled artizans, has it?—Yes, to mechanical engineers.

1287. Are you able to express any opinion as to whether the rest of the public would so readily fall in with the system?—That is a thing on which I can express no opinion based on experience.

1288. You have had no means of testing it, have you?—I have had no means of testing it. The men we have at Thames Ditton are just Englishmen, and other Englishmen ought not to have any difficulty about it. I should say it is a great deal easier myself. Personally, I am in a difficulty in this respect in giving on opinion, because I was abroad when a boy, and was educated to millimetres and decimal notation, and to go to English measurements after that was a terrible thing. I can remember, even now, when I came home it caused me a lot of trouble.

1289. Do you think Englishmen would generally take kindly to French terms?—I think the term "millimetre" is now so well known that everybody accepts it, and I do not think anybody would have any doubt as to the term.

1290. You are not in a position to say whether it is much known in commercial firms, are you?—No, I am not in a position to say that.

Mr. *Godson.*

1291. I suppose your mechanics are ordinary mechanics, are they not; there is nothing very special about them?—They are good mechanics; but some of our men were agricultural labourers, who have been trained up.

Sir *John Barran.*

1292. Turned from agricultural labourers to engineers?—Yes.

Mr. *Godson.*

1293. And they have no difficulty, have they, in learning the system?—None whatever; there has been no difficulty whatever.

Dr. GLADSTONE, called in; and Examined.

*Chairman.*

1294. As we all know, you have for many years been Vice Chairman of the London School Board?—I was vice-chairman at one time, and I was 21 years on the Board.

1295. Have you given special attention during the many years you have served on that Board to the question of the educational value of the present system of weights and measures, and of the metrical system of weights and measures?—Yes.

1296. Can you tell the Committee what is the amount of time given in the code in our elementary public schools to the arithmetic of weights and measures which possibly might be saved if a more systematic arrangement were adopted?—In the Government Code, under the head of Arithmetic, they give the syllabus for each of the standards, and there is a note which says: "The scholars in Standards 5, 6, and 7 should know the principles of the metric system and be able to explain the advantages to be gained from uniformity in the method of forming multiples and sub-multiples of the unit. As a preparation for this it will be useful to give in Standard

*Chairman*—continued.

Standard 4 elementary lessons on the notations of decimal fractions." I perhaps ought to have begun by stating the ordinary system. It is this: Under Standard 4 the children are expected to be taught, besides money, the table of lengths and the reduction of common weights and measures. It says: "In the table of lengths only yards, feet, and inches will be required in this and the 5th Standards."

1297. Does it go on to say anything with regard to the other measures of area, capacity, and weight?—Yes. In a note it says "*weight:* ton, cwt., qr., stone, lb., ounce, and dram; *length:* mile, furlong, rod or pole, chain, yard, foot, and inch; *area:* square mile, acre, rood, square pole or perch, the yard, foot, and inch." That is for boys only. Then "measures of *capacity:* the quarter, bushel, peck, gallon, quart, and pint." Then comes time.

1298. Do I understand that is all included in Standard 4?—That is included or commenced in Standard 4.

Sir *Samuel Montagu.*

1299. What is the time given to it?—I have added together what is required in Standard 4 and Standard 5 with its practice and bills of parcels, and also Standard 6, with its mensuration of rectangles and rectangular solids.

*Chairman.*

1300. Can you tell the Committee how many hours a week are needed for that study?—My estimate is that for that portion of the work it would take the principal part of Standard 4 and a considerable portion of time in Standards 5 and 6, and that 350 hours are given at present to teaching our system of weights and measures. It so happens that I wrote to one of our best teachers a few days ago, and asked him for an estimate, and without knowing at all my means of estimation, he gave 342 hours.

1301. Is that 350 hours spread over a year?—Yes, or rather over three years. There are about five hours a week on an average given to arithmetic; it varies a good deal in different schools, but we have statistics at the Board which lead us to believe that.

1302. Five hours a week would be 260 hours, would it not?—Not quite that, because there are only 44 school weeks in the year.

1303. That would be 220 hours?—Yes.

1304. Then your 350 hours could not be got into the year, could they?—No; that time is spread over three years, really over Standards 4, 5, and 6, but mostly in Standard 4.

1305. What you mean is 350 hours is the time needed to get up the weights and measures. How long it is spread over is another matter?—Yes.

1306. But they have to get through in the 4th Standard, have they not?—They have in the 4th, 5th, and 6th, but principally in the 4th, which is considered the heavy Standard in arithmetic. In many schools they give extra time, twenty minutes for instance longer, to the subject.

1307. Then in the 4th Standard the children must occupy a great part of their time in arithmetic, and in getting up these weights and measures, must they not?—Yes, they do.

*Chairman*—continued.

1308. Can you tell the Committee what else they learn in the 4th Standard?—Yes; the compound rules of money.

1309. What does "compound rules of money" mean, adding pounds, shillings, and pence?—Yes; I suppose it would be so, but, of course, I did not count that, because that does not come under your inquiry. Then I consider, besides this actual loss of time in school life, there will be a loss of time all through life, because it takes a longer time to calculate in these various weights than to calculate simply by tens.

1310. There is also a loss in this sense, too, is there not, that the time at school could have been much better employed than in these particular gymnastics dealing with tons, and hundredweights, and so on?—Yes.

1311. It has been suggested by one witness that he thought it not a bad thing for the children to have these things to do; is that your opinion?—It is not my opinion, but I have heard it stated. I have heard it stated also that in Canada they make the top children in the school learn this English system as a sort of mental gymnastics.

1312. That being the case as to the old system, can you tell the Committee anything about the new. You have read to us that the children are supposed to be acquainted with the metric system, or the principles of it. Would it take 350 hours for the children to learn the metric system?—I think it would take very little time indeed, because they have to learn decimals in any case.

1313. Would it be very far-fetched if I were to say it would not take more than 350 minutes?—I do not know that it would; it would take a little more than that, I daresay.

1314. Can you tell the Committee whether, practically, the children are taught in the Board schools of London the metric system?—In regard to that, you may recollect that the metric system was taught in our schools years ago. Then it was dropped from the code, and replaced again.

1315. Do you know when it was placed in the code again?—In Mr. Forster's "New Code," introduced in 1871, it is provided that "In all schools the children in Standards 5 and 6 should know the principles of the metric system," and the advantages of uniformity. This was omitted from the code in, or about, 1877, and reinstated in 1891. At the School Board we made arrangements for teaching the metric system, and we provided measures and weights, and so on, because we like to teach in the concrete way, rather than in the abstract way. Some of these were very good, and they were placed among the loan apparatus; they could be asked for by schools. That has ceased now, but when this matter appeared in the code again, we placed some books on the metric system, and charts, upon the requisition lists. One of these charts is to be found now on the walls of almost every school.

1316. So that by eyesight the children become acquainted with the length of the metre, and the size of the litre, and so forth?—Yes, and they are liable to be examined by the inspector

*Chairman*—continued.

on the subject; but I fear there is practically very little teaching on the matter given.

1317. Has the Board not taken any steps to insure the teaching of this simple matter in the schools?—I do not think there are any obligatory steps taken; it is rather considered that as it is in the code it will be taught. But I have talked with the inspectors on the matter, and they tell me it is not very much taught in practice. Some of them are very much in favour of teaching it, but one or two others, I think, do not care about it.

1318. You mean, unless it is insisted upon; there is so much else to be done that the matter escapes attention?—Yes, that is about it.

1319. Would you advise any further steps being taken in the code to insist more specially on the teaching of the metric system in view of the possibility of something being done towards making any change?—Yes, I think it might have a more prominent place in the code; and I think decimal fractions ought to be taught before vulgar fractions. It is so in most of the Continental codes, and ought to be in the English code, because it is much easier to teach children that which is simpler first, instead of the reverse order, which is adopted in our code.

1320. The teaching of decimals at an early period would, of course, help the introduction of the metric system, that being a decimal one?—Decimals, of course, might be taught abstractedly, but I would certainly have it that every school should be furnished with models—with real measures and weights—like the kilogramme, metre, and so on. It was proposed just before I left the Board that we should do that; but what was decided was this: that we should get these things, and put them upon our requisition list, so that any school might ask for them that liked. That is being done now. I am told they are actually collecting the specimens.

1321. Does that refer to an actual metre measure and a like measure?—Yes.

1322. These can be got now, can they, by any of the Board schools that choose to ask for them?—I believe it is not actually on the requisition list at the present time; it is *sub judice* now. It is to be on the requisition list. That was decided four months ago; but I am not sure it has been put on the list yet, or that the actual specimens are in the office.

1323. You are no longer on the Board, are you?—No; I am no longer on the Board, but I am told that that is the state of affairs now.

1324. During the period you were on the Board did you strongly urge that this should be done?—Yes, from time to time I did.

1325. With regard to the pupil teachers' schools, what has been done in reference to this matter?—I am afraid the matter is in a worse state with regard to the pupil teachers' schools than it is in the boys' and girls' schools, because it is not mentioned in the code at all; it forms no part of the examination, I believe, for the Queen's Scholarship. I called at one of the pupil teachers' centres at William Street, and asked there as to the matter, and the master said: "We have so very much to do that we do not do anything beyond what is required." He was himself very much

*Chairman*—continued.

in favour of the teaching of the metric system, but practically he did not do it, because his scholars were not examined upon it. I asked him if the boys and girls came up with some knowledge of it to his school, and whether they had learned it in the ordinary elementary schools. He said a very few of them; a few boys knew about it, but very few girls.

1326. Do you think there would be any opposition on the part of the masters if the matter were made compulsory or was strongly recommended?—I do not think there would be any opposition at all on the part of the masters. I do not mean to say that here and there there would not be some masters who would not like it, but the great mass of the teachers, I am pretty certain, would be in favour of the metric system; they would like to see it general, because they would like to save this time for other things if they could.

1327. Would you go further and say that the masters would welcome a change from the present system to the metric system?—They have already sent memorials to that effect.

1328. What has been the action of the Board inspectors on the matter?—I find that the Board inspectors are somewhat divided in their opinion. I was told by one, probably the most intelligent one among them, that they were all in favour of the metric system, but I found that there was one gentleman present who seemed to have some of the ordinary objections to it.

1329. He had objections, had he?—Well, perhaps they hardly amounted to objections, but certainly he was not favourable to it. I do not think he knew much about it.

1330. Did he give you any reason why?—We talked to him about the matter.

1331. Did you convince him?—I am not sure about that.

1332. Have you any reason to give for this neglect of the teaching of the metric system, when it stands in the code, as we have seen?—It is generally the additional trouble. I spoke to one of the head mistresses of our schools a week or two ago, and she told me she found that the inspectors did not very much insist upon it, and she said: "It is no use to girls after they leave school." Those were her words as far as I recollect. I have heard men teachers say much the same—that there is little opportunity of putting the system into practice afterwards. Of course, there is a feeling among teachers as among others—a sort of sentimental feeling with regard to the terminology; but that, I suppose, could be altered.

1333. As the Committee have just heard, men have been taken from the plough, have become engineers, and have adopted the word millimetre *con amore*?—Yes.

1334. And probably children would easily learn the word, would they not?—Yes.

1335. There is no real difficulty about it, is there?—No, I think not; it is an imaginary difficulty. There is no difficulty abroad about it.

1336. In Germany the millimetre is as strange a word as it is in England, is it not?—It is a strange word, of course, but they speak of the millimetre.

1337. Wha

*Chairman*—continued.

1337. What I meant was, that it is not a German word?—No.

1338. I do not know that we need trouble you to go into the question of the disadvantages of the present system, as we have heard so much about it, and they are so patent, but perhaps you would like to say a word or two on the matter?—If you do not wish to go into it I will not trouble the Committee with it; but there is one point, or two points from an educational point of view, in which I think there is a disadvantage. I think the want of relation between the measures of weight and capacity is undesirable, or rather, I should say, it would be more educational if there were a simple relation between them. Of course, that relation exists in the metric system, but does not exist in our exceedingly confusing English system. That, I think, would be an educational advantage. Some of our teachers have introduced it. At one school I went to lately I asked the master what he was doing, and he showed me he had actually a cubic decimetre, and a litre measure, and a kilogramme, and he showed to his scholars that these were the same thing: that a litre was a cubic decimetre, and a litre of water at a particular temperature and pressure was a kilogramme in weight. All this, of course, was valuable. Then, again, some of the names give false ideas. For instance, we are always in the habit of talking of hundredweights. What is a hundredweight? Of course it means 100 pounds; but it is really 112 pounds, so that there is a logical confusion. A dozen is 12; but in some trades (bakers) it is 13. Then there are instances of the same name expressing different values, but I need not go into that unless you wish. I have some instances here: The ounce is the 12th part, or the 16th part, of a pound, according to circumstances. But there is more difficulty in some other ways; for instance, a stone of meat is 8 lbs., but the ordinary stone is 14 lbs.

1339. As an eminent man of science will you state to the Committee as to the universal employment not only of decimals, but of the metrical system in all scientific work; what are the advantages which are found to ensue from that system?—I think the advantages are so great that without them it would really render a good many of the operations in physical and chemical work practically impossible. We could not do them if we had to make our calculations in all kinds of odd directions: at present we are using grammes or grains. For instance, in my own laboratory I use the decimal system with grammes, and decimetres, and so on. It is exceedingly simple, and is known all over the world, so that the scientific papers in England are understood on the Continent, and *vice versâ*; we have one common language in that respect. These are important advantages, and also it simplifies calculations so enormously; in fact, calculation would be very difficult to make without it.

1340. And what is found so advantageous in scientific matters, I suppose, you would say would be equally or more advantageous in general business and trade if it can be introduced?—I should think so.

1341. The advantages of having an inter



*Chairman*—continued.

national common system is not merely confined is it, to scientific purposes?—No.

1342. But I suppose you would say it would be more easy to use in the case of scientific matters?—Yes; I do not see that there is any difference in the argument between one and the other; I am not prepared to say which it is most important for.

1343. Referring again for a moment to the educational question, can you tell the Committee anything about what has been done in the provinces or in the rest of the country; you have spoken entirely of London Board schools?—I have no means of judging about that exactly, but I should imagine that it is very much the same as in London; that in some places, probably in some of the more active towns in the north, such towns as Nottingham and Bradford, where there are very good and energetic School Boards, they may probably teach it a little more, but I am afraid that under many School Boards it is not taught at all. It would depend mainly upon whether Her Majesty's inspector insists upon it or not.

1344. Do you think, by a little pressure put upon Her Majesty's inspectors by the Education Department, much good might be effected?—Yes.

Sir *John Barran.*

1345. You say that the teachers generally are not very strongly in favour of the change; is that the result of their having their hands so full in teaching the old system, and other subjects, that they have very little time to teach the new system?—I believe, theoretically, they are very generally in favour of it. I believe, practically, that unless it is insisted on by the inspector, they give but a small amount of time to it, because other things press, and at present it is an addition to their work.

1346. It would increase their work, would it?—At present it would increase their work.

1347. Therefore, the only hope of getting it through would be to diminish the work in some other branches, and to enforce the teaching of the metric system?—Yes, to a certain extent. I have a note here of what the teacher I referred to just now as having made the same estimate of time as myself says: "In the metric system we give half-a-dozen lessons simply to explain the principles and show the advantages, but do not profess to teach on that system." I know he is a very intelligent man, and his scholars will learn a great deal about it in those few lessons he gives.

1348. But the general teacher, you think, finds his hands so full that he would object to add this to his tasks unless he was compelled?—Of course, that is the main obstacle there is no doubt; but there may be another reason, namely, that the teachers have not been taught the system themselves generally.

1349. How long would it take to teach a pupil teacher, do you think?—A pupil teacher, as I have said, may have learned something in the school previously, but as far as I can see he has very little inducement to learn anything about the metric system during his pupil-

Sir *John Barran*—continued.

teachership; he is not examined about it, and he can enter the training college without it. I have looked through the last Report of the Committee of the Council on Education, and at the syllabus of the different examinations, and I do not see it mentioned anywhere. I have looked also through Mr. Oakley's last Report upon the training colleges. I did not read every word in that Report, but it was not there at all, as far as I could see.

1350. But supposing it was made compulsory in reference to examination, how much time would it take for an ordinary pupil teacher to become pretty proficient in the system?—I should think he would not need many hours, because he has already learned decimals and the use of decimals—he must understand that, and it is merely applying the decimals to particular things. He would have to learn the names of the litre, and so on, but that would be perfectly easy.

1351. Do you think it would be desirable to enforce that as one of the subjects of examination?—I think it would be most desirable.

Mr. *Godson.*

1352. Do you know of any teacher who has tried teaching children in this metric system, and who could give evidence before the Committee as to the effect which could be produced in a given amount of time?—The gentleman who wrote this letter would be such a one. I am sure he would come if you asked him, and I daresay I could easily think of some others.

Mr. *Jasper More.*

1353. Do you think the public generally would be accustomed to the system if it were introduced?—I think a very good thing would be to make the children accustomed to it in the schools; and if the children, as they grow up, know anything about it, they will be capable of using it. As regards the parents, and others, I think where it has been actually introduced on the Continent—for instance, in Germany and Italy—there has been no difficulty found about it. Of course, there would be a little difficulty with some people with regard to the transition, but it would very much facilitate its use if it were taught properly in the schools, and was compulsory in the elementary schools.

1354. Do you think it would be as easy to introduce it into England as it was in Germany?—I do not see at all why it should not be.

*Chairman.*

1355. Have you any other information which you can lay before the Committee?—To show how easy the system is I might refer to this matter, which I have not done before. In the foreign codes there is not only a shorter amount of time given to arithmetic, as far as I have been able to look at them, speaking of Belgium, Prussia, and Austria; but also in France they teach the litre, and metre, and so on, in the *écoles maternelles*—answering to our infant schools.

*Chairman*—continued.

1356. It has been stated by a previous witness that a whole year would be saved if we had not to teach the children the present system of weights and measures; do you think that is an overstatement?—I think that is rather an exaggeration. A whole year in the teaching of arithmetic would be saved certainly, but not a whole year of school course, or anything approaching that. Very likely it would turn out there would be much more than a year saved in the teaching of arithmetic, especially if they taugh decimals before vulgar fractions.

1357. Do you think that recommendation ought to be added to any recommendations made?—Yes.

1358. Not only that the metric system should be taught, but that the decimals should be taught before the vulgar fractions?—Yes.

1359. And you say we should be strengthened in any recommendation of that by the fact that that is the case abroad everywhere?—That is the case abroad.

1360. Having gone into this question very fully, can you tell us why, in our English system, vulgar fractions are taught before decimals?—I suppose our code has grown, and I imagine in the earlier elementary schools they only taught vulgar fractions.

1361. You think decimal fractions are a modern invention?—Yes, and therefore put at the end of the school course.

Mr. *Godson.*

1362. You say you have found that one or two persons have objected to the metric system as being a French system; supposing they were told it was partly Greek and partly Latin, do you think they would object?—That would probably remove the objection.

Mr. *Jasper More.*

1363. Do you think it would be possible to express the same terms in the English language?—No doubt words could be invented, but there is an advantage in keeping to the same way of writing them. For instance, the last witness, I daresay, would find it awkward in communicating with foreign parts if he had to use other words, but it could be done. The Germans do use, as far as weights are concerned, other words, and not the French words.

*Tuesday*, 30*th April* 1895.

MEMBERS PRESENT.

Sir John Barran.
Mr. Burt.
Sir Edward Hill.
Sir Samuel Montagu.
Mr. Jasper More.
Sir Henry Roscoe.
Mr. James Stevenson.

SIR HENRY ROSCOE, IN THE CHAIR.

Professor K. PRYTZ called in; and Examined.

*Chairman.*

1364. YOU are Professor of Physics at the Copenhagen University and Technical Institution, are you not?—I am Professor of Physics at the Technical Institution of the Copenhagen University.

1365. You have, I believe, paid some attention to the question of weights and measures as in use in Denmark?—Yes.

1366. Can you describe to the Committee the system of weights and measures in use in Denmark?—Yes, I can, but I do not remember, exactly, the relation between a foot and a metre.

1367. Is the system of weights and measures in use in Denmark the metrical system as in use in Germany and in France?—No, we have our own system.

1368. Is that system a complicated or a simple one?—Rather simple, I should think.

1369. Have your lengths of measure any relation to the metre?—Not any simple relation to the metre.

1370. Has the unit of weight any simple relation to the kilo?—Yes.

1371. What is the relation?—A pound is exactly half a kilo.

1372. Do you adopt a decimal system of weights and measures or a duo-decimal system?—For the pound we have the decimal system.

1373. That is to say, you divide your pound into 10 divisions?—Into hundreds.

1374. With regard to the measures of length, what do you do?—We have as a unit a foot.

1375. Is that divided into 12 parts or inches?—Yes.

1376. How long has this system been in use?—It is very old.

1377. But the weight of half a kilo for a pound is not old, is it?—No; but I do not remember exactly when it was introduced; some 50 years ago I think. Our old pound was so close to half a kilo that the new pound could be defined as half a kilogramme.

1378. Are inspectors of traders' weights appointed with you in Denmark as they are in England?—No, we have measures that are stamped, and weights that are stamped, but we have no inspectors so far as I know.

1379. Is it anticipated that some change may



*Chairman*—continued.

be made in your system of weights and measures?—Yes, there has been a proposal made in our Parliament.

1380. Proposals have been made in the Danish Parliament for the purpose of introducing the metrical system?—Yes; but they have not been accepted by Parliament.

1381. Is there much feeling in Denmark on the subject?—Yes.

1382. In favour of or against the metrical system?—In favour, I think.

1383. You are surrounded, are you not, by countries which have adopted the metrical system?—Certainly.

1384. I suppose Norway and Sweden and Holland have the metrical system in use, have they not?—I do not know how it is in Holland, but the other countries have the metric system.

1385. And Germany?—Yes.

1386. With regard to Schleswig-Holstein what is the case?—There also the metrical system is in use.

1387. In your opinion, would it be an advantage to your country to adopt the metrical system, seeing that you are surrounded by countries using it?—Certainly.

1388. Do you anticipate that before long your Parliament will consent to an alteration of the kind?—I think it will.

1389. Is public opinion coming round to the necessity or the advisability of the change?—I think the common opinion is for the most part in favour of the metrical system.

1390. Have you come to England to instruct yourself as to what is doing here with regard to weights and measures?—Yes, with regard to instruments for comparing weights and measures, as to standard instruments.

1391. Would you like to make any further remarks to the Committee on the subject?—I should like to say that the metrical system is very much used in Denmark in business.

1392. Although it is not legal?—Although it is not legal. In the Army it has been introduced for the dimensions of guns, and also for the exercises, the distances, and so on.

1393. For military distances, you mean?—Yes.

*Chairman*—continued.

1394. Is the metrical system used much amongst the merchants for foreign trade?—Yes, it is much used; mostly by those who are engaged in foreign trade.

1395. Is the system permitted, then, although it is not legal?—Yes, it is.

1396. Then, in Denmark, it is possible to use the kilogramme and the metre in trade?—Yes.

1397. Although they are not legalised?—Yes.

1398. There is no penalty, is there, for using the metrical system?—No.

Mr. *James Stevenson.*

1399. In the railway time tables in Denmark, how are the distances between one place and another mentioned; by kilometres, or how?—As far as I remember, both ways are used; in our time tables the kilometre is used, I believe.

1400. What was the measure of length along a road, before the kilometre?—A mile; we have a mile, but it is seven kilometres, I believe.

1401. In the measuring of land in Denmark, or measuring the size of a farm, is it done by the metrical system or by some old method of land measurement?—Legally, it is measured by the mile.

1402. By the square mile?—Yes.

1403. But also by the metric measurement, is it. On what scale are the Government maps in Denmark printed?—Our military government maps print both miles and kilometres.

Mr. *Jasper More.*

1404. You say the metric system is used for foreign merchandise, do you?—Yes.

1405. Suppose you have business with England, what system do you use; do you use the metric system, then?—No, I think we should use the English system then.

1406. Are the English weights and measures understood in Denmark?—Yes, we use very much the English inch, for instance.

1407. What weight do you use when you send your butter to England; we take a great deal of your butter, as you know?—Yes.

1408. How is it weighed?—I do not know.

1409. Do you know how agricultural produce is generally weighed?—I think it is by English weight, but I do not know.

1410. Are English weights taught in the schools in Denmark?—No.

1411. Who are the people who understand it, do the farmers understand it?—I do not think so. The engineers use it very much.

1412. Do any of the less educated people understand English weights and measures. Do you think any farmers understand them?—No, it is only the engineers.

1413. Do the engineers sell their agricultural produce for them. How do they send their butter to this country, by what weight. If the farmers do not understand the weight, who arranges it for them?—I do not know how it is done with regard to butter.

1414. Suppose a barrel of butter is sent, do you know what weight is used then?—No.

Mr *Jasper More*—continued.

1415. If you measured a farm, as you say by the mile, what would part of it be called. What length do you reckon by?—We have a unit, that is, as far as I remember, 14,000 square feet.

1416. That is applied to land is it?—Yes, that is the unit for land.

1417. What is that called?—Toende land, 14,000 square feet.

1418. Do you understand the English weights yourself?—No, I cannot say I do. I have used them very little.

1419. Are they understood much in your country?—Yes, by the engineers.

1420. Only by them?—Yes, only by them.

1421. Have there been any public discussions on the change of the system of weights and measures in your country?—There is not much discussion about it.

1422. What is the opinion of the public on the subject then?—I think the public opinion is in favour of the metric system.

1423. Has there been a vote upon it in your Parliament?—Yes.

1424. Do you know how many voted for it, and how many voted against it?—I do not remember; I think the one House has been for it, and the other against it.

1425. Then there is not a unanimous opinion; everybody is not of the same opinion?—No.

1426. Do you know what the lower classes think on the subject?—I think they are against the metric system; but the higher class are in favour of it.

Sir *Samuel Montagu.*

1427. You mentioned that the old pound was very nearly a half kilo; was it the same or nearly the same as the English pound?—No.

1428. You said it was very near half a kilo?—Yes.

1429. Our English pound is very near half a kilo?—Yes, but ours, I think, was much nearer.

1430. Nearer?—Yes.

1431. Do you know the exact relation between the old Danish pound and the English pound?—No, I do not; but as far as I remember, the old pound was defined by the weight of water, a cubic foot of water being 62 pounds.

1432. How do they measure liquids in Denmark. Supposing a man buys a glass of beer, what measure does he get?—A pot.

1433. What relation does that bear to the French or English measure?—A pot is nearly equal to a litre.

1434. But you do not use the litre, do you?—No.

1435. You only use the metrical system for weights?—Yes.

1436. But for measures of length or capacity, you keep still to the old system, do you?—Yes.

1437. Which Chamber was for the metric system, and which Chamber was against it; the Lower or the Upper Chamber?—What would be called the Upper Chamber was in favour of it, and the Lower Chamber against it.

Mr. CHARLES UMNEY called in; and Examined.

*Chairman.*

1438. YOU are a partner in the firm of Wright, Layman, and Umney, manufacturing chemists and merchants of Southwark, are you not?—Yes, my firm supply the War Department with medicines.

1439. You are also the chairman of the chemical section of the London Chamber of Commerce, are you not?—Yes.

1440. And honorary secretary to the Drug Club representing upwards of 20 of the largest firms of wholesale druggists and manufacturing chemists in England?—Yes.

1441. Also a member of the committee appointed by the Pharmaceutical Society of Great Britain to aid the Medical Council in the revision of the British Pharmacopœia?—Yes.

1442. So that you have had plenty of opportunity of judging with regard to the question of weights and measures so far as the chemical trade and also the pharmaceutical trade of the country is concerned?—I think so.

1443. I suppose that London is one of the great centres for the export and import of drugs of various kinds?—Yes, London was almost entirely, at the beginning of this century, the drug market of the world, and it is so now perhaps to the extent of 70 or 80 per cent.

1444. Packages of drugs are of all weights, I presume?—Yes, they are sent from all parts of the world to merchants in London; they pass chiefly through the East and West India Dock Company or other warehouses; they are then weighed by Imperial weights and measures; the account sales are then made up in Imperial weights and measures and money, and I have never learnt—and I sit at the drug auction every other week, and have done for 20 years—that any objection has been made to that system of trading so far as the import of drugs is concerned.

1445. Are you speaking of drugs of vegetable origin?—Yes.

1446. Do these drugs of vegetable origin, coming from all parts of the world, come from countries in which the metrical system is adopted?—Yes, almost entirely so.

1447. When they are consigned to British houses, are the consignment notes made out in kilos?—No, they are seldom weighed, but the East and West India Dock Company weigh and tare the packages, and their actual weights are taken to be the real weights, and all the sales in Mincing-lane are based upon their weight slips; their weight slips are law, in fact, one cannot dispute them.

1448. Then whatever weight may be used by the parties sending the drugs into the country, they are entirely ignored, as it were?—That is so. If a parcel of ipecacuanha slung on the back of a mule weighs so many kilos, its weight is perfectly disregarded when it comes here.

1449. How are those people paid, then. If you are dealing with a merchant in America, he sends an invoice to you for so much ipecacuanha made out in kilos, does he not?—He would send his invoices made out in that way to merchants in London, but they would remit him in account sales on weights made up entirely according to English weights and measures.

*Chairman*—continued.

1450. And he has to alter his weights if he wishes to know what he is getting in kilos, has he?—That is so.

1451. And does he accept that?—Yes.

1452. The same principle of course is not adopted in Germany, because they have got the metric system, so that a man sending his weights in in kilos, receives payment in kilos, does he not?—The Germans invoice chemical drugs to us very largely.

1453. I am speaking first of all of the way in which the German merchant would obtain his goods from the South American producer?—But he would not have them. The Germans buy in the London market, in Mincing-lane. 75 or 80 per cent. of the men sitting there are buying for the markets where the metric system is in vogue. Germans sit there, and buyers for France, Russia and Italy.

1454. Supposing a German comes to buy in Mincing-lane, he has to buy in our pounds and hundredweights, does he not?—That is so.

1455. And when he sends them back to Germany, they have to be sold according to the metric system, have they not?—There, I have no doubt, he would invoice by the metric system.

1456. Do you think that British interests have been damaged by the strict adherence to Imperial weights?—Not at all, and I should be very sorry to see them altered precipitately. I should be very sorry to see the trading of the Port of London altered in any way other than by a gradual process.

1457. Have you any objection, then, to the use of the metric system?—Not at all; I would like to see it; but I do not think the public are quite ripe altogether for a sudden and compulsory change.

1458. But, so far as your opinion is concerned, there would be no objection to a gradual change in this particular branch from the present system to the metric system?—I think it is most desirable.

1459. With regard to drugs of chemical origin, we do produce, of course, chemicals in considerable quantities, or what may be called the raw material in large chemical trades, such as caustic soda, bleaching powder, and tartaric acid; but these are not used chiefly as drugs, are they?—No; the great variety of chemical substances, unfortunately for us, come from the Continent of Europe, and, I think, chiefly from Germany.

1460. With regard to consignments of such chemical substances from Germany to England, are they exported from Germany to us in kilos or pounds?—If I send a telegram to Germany for an immediate shipment of certain chemicals, in all probability they would be sent to me in half kilo bottles, or 250 gramme bottles (quarter kilos), that is, if they were wanted immediately; but if I instructed my manufacturer in Germany to send me so many English pounds or ounces he would carry out my instructions to the last letter, and I should find

*Chairman*—continued.

find he would be as correct in my weights as I am myself.

1461. But he would probably put some extra charge upon those goods for the trouble of conversion from kilos, which he uses and which are his legal weights, to any other particular weight that any customer might desire to have, would he not?—No, I do not think so; the Germans handle these weights and measures very fairly, and we in the chemical trade especially understand them on our side.

1462. It is a labour which has to be undergone and an expenditure which must be met by somebody, I suppose?—I look at it, perhaps, more from a chemist's point of view; a man who is trained in a laboratory has a thorough knowledge of weights and measures, and we have, perhaps, a better knowledge than the general trading public have, and we follow anything expressed in metric weights and measures better than the trading public generally do.

1463. What I wish to ask you is this: If the German manufacturers usually employ kilos and parts of a kilo in their work, and if all their materials are weighed out in this way, there must be a certain amount, it may be a small amount, of extra labour to re-bottle these things with the English weights and measures, must there not?—No, I think they have the weights in their own factories. I may mention one chemical which is largely used in photography, viz., pyrogallic acid, which wholly comes from Germany; it reaches us in cases which contain 100 1-ounce (English) bottles all ready for sale for the English market.

1464. I understand from you, then, that the German will take the trouble to put up the bottles, whether for pharmaceutical purposes or otherwise, if desired, according to the English system?—Yes, and not only weighed by the English system, but compounded by the British Pharmacopœia, and as well as we can do them ourselves. From Hamburg, for 40 or 50 years, we took all our medicinal substances for shipment in bond, brought them into the Port of London, and then transhipped them (in bond). Happily, within the last three or four years, on account of privileges given by the Inland Revenue, this has been done away with.

1465. But that does not apply especially as to whether it is done by the metric system or not, does it?—It does not.

1466. Your trade, of course, sends large quantities of drugs to South America, the colonies, and elsewhere, does it not?—Yes.

1467. Do you find that you are in any way handicapped in these markets by not being able to employ for trade purposes the metric system which is adopted in those countries?—That is so. Several firms in Great Britain, some being in London, and others in Liverpool, ship very largely to South American markets, Peru, the Brazils, and so on, where the metric system wholly is in use. I have letters here from six firms, Evans, Son, and Company, in Liverpool, and others in London, stating that to refuse to weigh medicinal substances by the metric weights and measures would simply stop their business altogether.

1468. Will you explain fully what you mean by that; do you mean to say that at the present moment the absence of legality in the use of the metric system is felt to be deleterious or prejudicial to their trade?—It would be prejudicial. We did not know the reading of the law until, very recently, an inspector from the London County Council walked into one of our large drug warehouses in London, and challenged the presence of a kilogramme weight that was being used for weighing drugs for South America. "What have you there?" he said. He was told such and such a weight. "You must not use that, you must use its equivalent," he said; and upon that the London Chamber of Commerce took action.

1469. What action did they take?—They framed a small Bill, the object of which was sent up to legalise metric weights and measures, especially as to medicines.

1470. Who has taken charge of that Bill?—Sir Albert Rollit I believe. I think this Committee was appointed subsequently, and in that way, perhaps, the Bill was stopped.

1471. Has that Bill been introduced?—That I cannot tell; I saw it in draft and I have seen it in print.

1472. A Bill for the purpose of legalising the use of the metric system of weights and measures for trade purposes?—For trade purposes in drugs.

1473. For your particular trade purposes?—Yes, that is all we were looking after.

1474. Then I understand that your trade does feel it to be an objection, and a serious drawback, that they are not permitted to use metric weights in exporting goods to foreign countries using that system?—That is so. I have here letters from six leading firms that do business on the metric system.

1475. Do they all agree in this?—They all agree it is desirable they should have full opportunity to send their goods weighed by metric weights to anyone who requires them; in fact, one of these firms, Messrs. Horner, state that in some of the South American ports, with regard to the goods, unless they are weighed and measured by the metric system the Customs will not allow them to pass at all; I think you will find that stated in their letter.

1476. Do you put those letters in?—Yes, I brought them with that object. (*The letters were handed in.*)

1477. Who have you acting with you in the proposal to introduce this Bill?—The Chamber of Commerce of London are acting, and the Pharmaceutical Society are also acting.

1478. Have any of the other Chambers of Commerce expressed similar views?—I have not seen that they have.

1479. I understood you to say that some of these firms are Liverpool firms?—Yes; I am not sure whether the Liverpool Chamber has moved in the matter, but I am in contact with Messrs. Evans, through being secretary of the Drug Club. I may use, in my laboratory, for scientific purposes, the weights. I believe also I may check the accuracy of my goods coming from France into my warehouse, but I may not weigh my goods going abroad by the kilo.

1480. Mexico, Brazil, Chili, and Peru, all take large quantities of medicines, do they?—Yes,

*Chairman*—continued.

Yes, and Japan also takes a large quantity of chemicals.

1481. With regard to Japan, does the same thing hold good?—They have a pharmacopœia which is in the metric weights and measures; the Japanese are most advanced.

1482. Therefore, it would be important in that trade also, would it not?—Yes.

1483. The Committee have heard from a previous witness that, in some of the foreign ports, the Customs authorities refuse to pass goods unless they are made up according to the metric system; do you corroborate that statement?—From my own personal knowledge I cannot, but Messrs. Horner state that (and Messrs. Horner's firm is of great repute), and I have no doubt that it is so. I may say the Russians, during this present year, have adopted the metric system for medicine, they have been compelled to adopt it; it was not left to their option, but on the 13th January last pharmacists and medical men required to write prescriptions were required to dispense prescriptions by metric weights and measures.

1484. Where did you get that information from?—Dr. Squibb's monthly circular in which it states that by Royal decree on 13th January 1895, the commencement of the Russian new year, Russians were compelled (not left to their option) henceforth, to prepare and dispense medicines by the decimal system.

1485. You are aware, are you not, that Russia is the only country in Europe, besides ourselves, which has not the metric system in use?—That is so, up to January this year; but we have not it for medicine at this time.

1486. So that Russia is before us in that respect, is she?—Yes.

1487. I understand you are the honorary secretary of the Wholesale Druggists Club, and there, of course, you hear from the members about shipping these goods?—Yes; we have over 50 members.

1488. What do they tell you about this?—They one and all say that it is most desirable that they should have every facility to weigh their goods by metric weights or measure as occasion may require.

1489. Does that necessity arise from the competition which is now going on between this country and Germany, and France, for example?—Yes; Germans are to be found almost everywhere, and even in India. Of course, the metric weights question does not prevail there, because we ship invariably English weights and measures to India and our Colonies.

1490. Do you mean that German firms are supplying these goods in which you deal all over the world?—Yes; and their travellers go where our English travellers go. The particular house which was challenged for using these weights I know had very recently a partner in South America.

1491. What is the opinion of the chemical section of the London Chamber of Commerce in connection with this matter?—They agree that it is most desirable that the metric system should be permitted. Its compulsory introduction would, of course, upset trading, and would, it is thought, be a very great mistake.



*Chairman*—continued.

1492. Would you desire to see the metric system introduced first of all in a permissive manner before it is made compulsory?—Yes.

1493. Do you adhere to that statement with regard to its general adoption; not merely for your own trade?—Yes, generally for all purposes.

1494. You have referred to the serious competition which the English chemical trade suffers from the Germans. Do you attribute that to any extent to the fact that we have not introduced an international system of weights and measures?—No; I do not think that that has very much to do with it; I think it is more the absence of technical education amongst our people and a desire to live more luxuriously in England than in Germany.

1495. But are you of opinion that the introduction of a similar system would facilitate matters and prevent any amount of handicapping which we may suffer from?—Certainly; in our markets we ought to be able to go unfettered and send our goods unfettered to any market so far as weights are concerned.

1496. And if a revision of the British Pharmacopœia were to take place, would it, in your opinion, be desirable that an Imperial Pharmacopœia, founded on the metric system of weights and measures, should be adopted?—I think it would be most desirable, especially in the setting out of the formula in the pharmacopœia; it is so much more easy to comprehend a formula in 100 parts, and a foreigner, taking it up, even if he does not know the language, can see at a glance what is intended.

1497. It would make it less dangerous, would it, in making up the medicines?—Certainly.

1498. And there would be less risk of mistakes, would there?—I am sure a pharmacist dispensing a prescription could calculate with perfect mental ease a prescription written in the metric system; whereas, written in our system, he would stand a very great chance, if he were a foreigner, unless he had constant practice with our weights, of poisoning some one.

1499. Have cases occurred in your knowledge of mistakes having been made?—I will not say by the confounding of a gramme with a grain.

1500. I refer to the system at present in vogue as being so complicated that it lays itself open to mistake?—I daresay you know the sign used by medical practitioners for indicating the ounce and the drachm. They are very much alike; they are so much alike that accidents have happened.

1501. Is it the fact that England is the only country of importance which has not adopted the metric system of weights and measures for medicines?—That is so. Japan has it, and Russia has it. Russia has introduced it this year. Every country of importance has introduced it. The last United States Pharmacopœia, which is a model book, is entirely in the metric system, and it has been made law during the last 18 months.

1502. Is the feeling you express a unanimous one amongst pharmacists, or at any rate, is it one which would be received with satisfaction among the profession of pharmaceutical chemists?—I think the better-educated pharmacists are in favour of the metric system.

 1503. And

*Chairman*—continued.

1503. And I believe the Pharmaceutical Society is, is it not?—Yes, the president and some of the leading members of the Council are much in favour of it.

1504. But of course, there may be many persons who would think it difficult to change the system?—I have no doubt at the foot of the text of each of the items in the pharmacopœia, it would be desirable to put the weights expressed by both systems side by side. A new edition is contemplated; the Medical Council have the subject of the revision before them now.

1505. And it lies with them to decide, does it, whether the metric system shall be introduced or not?—Yes; but it lies first with the House of Commons to legalise the metric weights.

1506. And that was the object of your Bill, was it?—That is so. We, of course, sell medicines constantly by metric weight; we sell a gramme of some particular kind of alkaloid, notwithstanding it is illegal to do so.

1507. There is a great advantage, is there not, in that the measures and tables of doses stated in the same system may be compounded by a pharmacist without knowing the language, even?—I think there is the greatest safety in the metric system so far as the dispensing of prescriptions is concerned.

1508. So that there would be much less risk of poisoning people, would there not?—Certainly.

1509. Can you say as much of our weights?—No; they are very confusing.

1510. Even in the hands of an intelligent foreigner?—Yes. You see we have two different ounces already in use in medicine; we have the avoirdupois ounce of 437½ grains, by which the commerce of the country is carried on, and we have the Troy ounce of 480 grains, by which medicine is dispensed.

1511. Will you tell the Committee your opinion of the method by which the introduction of the system should be effected?—I think it can only be done by a gradual process, by the thorough education of the rising generation; legalising the system, and allowing it to work into its place, which I have no doubt it will in the course of a generation; so that probably by the middle of next century, the metric system would be adopted entirely.

1512. Do you put it so far off as that?—Possibly; we are very slow in making a change.

1513. Are you aware that it has been done in three years in other countries?—Yes, by compulsion. Russia does things quickly.

1514. But the change was effected in Germany in less than three years?—But they are a better educated people than we are.

1515. Do you think they are quicker than we are?—No, I do not think they are, but the poorer classes are certainly better educated, and they teach the system in their schools, whereas we do not.

1516. Would you be in favour of its being taught?—Certainly, I think every child should be taught it.

1517. There is not much to be taught, is there?—No. I think it is simplicity itself. It is certainly much simpler than three barleycorns to an inch, 12 inches to a foot, and so on.

1518. Have you any reason to believe that the change you are suggesting in the pharmacopœia would be accepted by the medical profession without any difficulty?—I think some of the leading members of the medical profession are most desirous of introducing the system, but no doubt there will be others who would object to it. I come into contact with the medical gentlemen of the War Department, and I do not think they would object to it at all. They order their substances sometimes in grammes, and they have their prices even; if it be in decimals of a penny, for instance 3¾*d.*, they will not have it put into their bills as 3¾, but they have 3·75 put in, consequently they must realise there is greater facility in the decimal system.

*Chairman*—continued.

1519. You would not propose, would you, to adopt the system in the way you have informed us it has been adopted in Russia, namely compulsorily?—No, I would not like that at all.

1520. Do you think the pharmacists would adapt themselves to it soon?—Yes.

1521. And the wholesale druggists in the same way?—Yes.

1522. The fact that you have brought forward a Bill shows, does it not, that your trade desires to see the metric system legalised?—Yes; whatever it may be for other trades, we want the metric system legalised for the pharmacopœia use, and for the sale of drugs generally.

Sir *Edward Hill.*

1523. I understand from your evidence that you are in favour of the metric system as being more simple and more convenient than the present system?—Yes.

1524. And that, although you are able to carry on your trade in the purchases of foreign drugs, by the present system, there would be no difficulty whatever in resorting to the metric system?—Not at all.

1525. On the contrary, it would very much facilitate matters, inasmuch as it would avoid the working back from the metrical system to the other system?—Yes; allow me to give an example. If I am pressing almonds I take a thousand pounds weight, and my workman knows, when he has got to 425 pounds, that he has got 42·5 per cent. There is no difficulty about that; the workmen get to know the system, and follow it as simply as possible.

1526. I also understand that in your opinion it would be much better if the doctors were to write out their prescriptions by the metric system, rather than by the present system of hieroglyphics, which are unintelligible to the ordinary mind?—I think so; of course in the transition stage it would be difficult.

1527. Do you anticipate that it would be difficult for an educated man, like a doctor, to adopt?—Yes, we have doctors of 60 or 70 years of age who are constantly writing prescriptions.

1528. But they are highly-educated men, are they not?—So they are.

1529. And you do not think they would have great difficulty in adapting themselves to it, do you?—No, but one has to think in the metric system as well as write.

1530. I understand you think the process should be made gradual?—Yes, so far as trade is concerned.

1531. And

Sir *Edward Hill*—continued.

1531. And that you would commence with compulsorily teaching the metric system in all our schools, and legalising the metric weights and measures?—Yes, that is so.

1532. And that, you think, some time in the middle of next century it would come about; do you really think it would take so long as that, seeing that other nations have been able to accomplish it in so much less time?—Perhaps that was rather a long time, but certainly I think it would take almost a generation.

1533. May I take it that you think a compulsory change at once would be undesirable?—Most undesirable.

1534. But that it might be hastened say possibly in four or five years?—That possibly might be done.

1535. You said that the German working man was better educated than the working man in this country; do you think that that applies now that we have our great system of education in operation?—Yes, I think that applies in chemical factories even now.

1536. Do you not think that a very few years of compulsory learning of the metrical system, so simple as it is, would do all that is necessary?—It would clear up the matter of weights and measures; and as to other matters the Germans will still hold their own, unless we made some very rapid strides.

Sir *Samuel Montagu.*

1537. You stated that in Germany and also in this country there was no disadvantage as far as cost goes in making up the drugs in kilos or in pounds or in ounces, but would it not be the case that preference would be given supposing there was a great demand for an article to the country that ordered them in German weights, or in the metric system. Supposing there were two orders received at the same time, one for so many kilos or grammes, and the other for so many pounds, would not the Germans give the preference to that system which is easier to themselves?—I have no doubt they would give the preference to the metric parcel, because they would probably keep it already weighed in their stocks.

1538. And so in this country; if you had an order for the home trade in our imperial measures, and another for the foreign trade in kilos, you would prefer to execute the easier order, if the conditions were the same, would you not?—Yes, I think that would be so.

1539. So that, as far as the difference goes between the imperial measures and the metric system, it is a hindrance to foreign trade in some degree, is it not?—No, I do not think it is fair to put it in that way; it is only a question of arrangement in warehouses and factories of putting weights into the hands of the workmen and educating them.

1540. Is it not the fact that the bulk of the trade in drugs, as in almost everything else, is in favour of the home trade, and that most of it is done in the interior of the country, according to the weights of the country?—A large portion of our business is done abroad; not the larger proportion, however.



Sir *Samuel Montagu*—continued.

1541. Have you any information as to whether an ordinary apothecary would be in favour of the metric system?—The apothecary is almost an extinct person; he is merged into the medical man. The pharmacist is the man who dispenses the medicine; the man who keeps the open shop, he would not object to it; he now is an educated man; he passes compulsory examinations. I am an old examiner of the Pharmaceutical Society, and I know that men who came before me were questioned as to the metric weights and measures and so on.

1542. I understood that the wholesale dealing in drugs is in avoirdupois weight, and the retail in apothecaries' weight?—The dispensing of medicines is in apothecaries' or troy weight.

1543. Therefore there would be an advantage to trade if the same weights were used in the wholesale and the retail trade, would there not?—As far as medicine is concerned the great advantage would be to clear them both away altogether.

1544. But it would be a great advantage to that trade, would it not, to have the same kind of weights for the wholesale and the retail trade?—No, that would make a good deal of confusion, because we have fluid grains, and so on; it would not do to alter that at all.

1545. I do not say alter it, but if by the adoption of the metric system you had it for both trades, the wholesale and retail, it would be of advantage, would it not?—The grain to start with is precisely the same grain in both cases; the integral grain is precisely the same, but the ounce is different; gold is sold by the troy ounce; platinum is sold by the troy ounce, but ordinarily our wares are sold by avoirdupois.

1546. There is some slight difference in the apothecaries weight and troy weight, in the smaller quantities, is there not?—There are 20 grains in the scruple and 3 scruples in the drachm.

1547. We have not that in the troy weight for bullion purposes, have we?—No, but you have the 480 grains in the ounce.

1548. Are you aware that in Germany, not only the weights and measures, but the money, was altered into the decimal system in a very few years; would not you think that the same character for intelligence prevails in this country as in Germany, and that it would not take more than three or four years to become accustomed to the change?—I think it would be very undesirable to disturb British trade and the whole run of British commerce in three or four years.

1549. Do you think if the change were made permissive, say from the 1st January next, and after three or four years compulsory, that would be a long enough interval?—No, I think not; I think it should be longer than that; we know the French made a change immediately after a revolution, but I do not think it would do in this country; it would disturb our business too much.

Sir *John Barran.*

1550. Did I understand you to say that there was no objection to the present system of

Sir *John Barran*– continued.

weights and measures, as far as the import trade is concerned?—I have heard of none.

1551. And you say that the Germans at the present time are pushing their way into all countries?—Yes.

1552. Do you think it is probable that the Germans may influence import countries to send their wares to Germany, where their measures correspond with the measures which they use? —I do not think so, so far as the drug trade is concerned, because our ships, you see, are the carriers of the world. That is why London has been the drug market of the world for so many years.

1553. But are you aware that the trade of Antwerp is growing very much?—Yes.

1554. Are you aware that the woollen trade of Antwerp has enormously increased?—Yes.

1555. Have you any reason to suppose that while other trades are increasing with regard to imports into Antwerp, the drug trade is not likely to increase, and that that may be caused by the system of weights which is adopted?—Yes, that is quite correct. I told the Chairman just now that London was almost entirely at one time the drug market of the world, but we know now that Chinchona bark, for instance, goes to Amsterdam from Java, and we have similar instances of drugs going to other ports than London, such as ipecacuanha to Havre, and so on.

1556. If our system is continued, although at present only a little dissatisfaction exists on the part of the importers, do you not think if they can find another country where their own weights are used, and that country is likely to be a large consumer, it might have a tendency towards causing them to send their goods there? —I think it would have a very strong tendency, and I think it is most desirable to follow the trade.

1557. You say we are suffering in this country, from the want of technical education, as compared with the Germans, and that our system in some respects is rather an extravagant one?—Yes, you would find in Germany that even or eight men, doctors of philosophy, would be attached to a chemical factory, who would be content to work for 70*l.* or 80*l.* a year for years, on the chance of getting something better, and one cannot find men to do that in England.

1558. How do you account for that?—They are content to live less luxurious lives than men do in England.

1559. Our system of education of course is developing, and we shall in all probability overtake some of our difficulties?—Yes.

1560. In this country, when we were less rich than we are, we used to work for very much less than we do at the present time, but the Germans are now in a very lean condition, and want to get some flesh on their bones; is not that the reason why they are not so luxurious that we have to contend with them, and that therefore we must adopt our system whilst we can to the systems of those who supply us?—Yes, I think it is most desirable.

Mr. *James Stevenson.*

1561. I understand the drug manufacturers in this country are quite prepared to make up their packages in metric weights for those countries where those weights are required?—Yes, they do so now, but have been obstructed by a hint from the London County Council.

Mr. *James Stevenson*—continued.

1562. And they do not grudge the trouble, I suppose?—Not at all.

1563. Just as you said the German manufactures did not grudge the trouble to make their packages suit the English market when they had an English order?—Just so.

1564. Do you know of any case of exporters of drugs who have been interfered with in making up their packages by metrical weights?—None except the particular case I have referred to, which happened four or five months since.

1565. What was the name of the firm?—Davy, Yates and Hicks, wholesale druggists, of Southwark. The London County Council inspector in his visit asked what a certain weight which was there was.

1566. Does the supposed illegality of using metric weights for export trade actually stand in the way of the export trade?—Undoubtedly; and it is contrary to the Weights and Measures Act. If you read the present Act, you will find the use of that weight is contrary to the Act.

1567. There has been laid on the table to-day a letter from the clerk of the London County Council, addressed to the secretary of the London Chamber of Commerce, dated 25th March 1895, in which he says: "Sir,—In reply to your letter of the 2nd instant, on the subject of the Bill promoted by your Chamber for legalising the use of metric weights and measures for export trade purposes, I have to inform you that the Council resolved at its meeting on Tuesday last to do all in its power to secure the passing of the Bill during the present Session. In the meantime I may say that no instructions have been given to the Council's inspector to interfere with the use of metric weights and measures in the execution of foreign orders, nor is there any intention to issue any such instructions"?—I have seen that letter.

1568. Then is there any real serious danger of trade being interfered with?—Not now after that expression from the London County Council; but the fact remains that it is illegal.

1569. Is it not the fact that the drug manufacturers have injured their own interests by delay?—When the protest was made by the inspector it was immediately acted upon by the chemical section of the London Chamber of Commerce.

1570. Acted upon in what respect?—In order to get the law altered.

1571. Does the law require to be altered; that is my point?—I think, if you read the Weights and Measures Act you will find it is illegal to use any metric weight in weighing goods for sale.

*Chairman.*

1572. And when the London County Council say that they have instructed their inspector not to interfere, that only means that if a person chooses to act illegally they will not stand in his way; is not that so?—That is it; the Council sees like business men that business wants helping, not hindering,

*Chairman*—continued.

hindering, and it will accordingly stand by and see the law broken.

Mr. *James Stevenson.*

1573. Assuming it is an illegality?—It is an illegality.

1574. Is it not legal now for a London pharmacist to comply with the prescription of a French physician in the French language, using the metric weights?—I should say that it is illegal, but it is done every day, and every hour of the day, I am confident.

1575. Then, you can get a French prescription made up, can you?—Certainly.

1576. And no one interferes?—No one interferes at all, but it is illegal nevertheless, as I read and understand the Act of Parliament.

1577. Is it proposed in the new pharmacopœia to abolish the mysterious signs which are used by medical men?—I could not tell you; the issue of the pharmacopœia is entirely in the hands of the Medical Council. I am one of those appointed by the Pharmaceutical Society to aid the Medical Council from the drug aspect simply, and I could not answer that question at all.

1578. Then it is not the druggist who is responsible for those mysterious signs, is it?—No; that is quite a medical aspect altogether.

1579. When you say you think every child ought to be taught the metric system, do you think every child ought to be taught the Imperial system?—Certainly; while it is in use they must be taught it.

1580. Do you think it is taught in English schools what a pound weight is, namely, the tenth part of a gallon of water?—No; I think the ordinary multiplication table does not show that.

1581. And yet that is the foundation of our system of weights and measures, is it not?—It is upon that point.

1582. Would not there be an anomaly in that, where the children were being taught the basis of the metric system, their education was being neglected with regard to the basis of the Imperial system?—Well, the multiplication tables are not so complete as they might be.

1583. You gave an instance about a workman pressing 1,000 lbs. of almonds, and so on?—Yes.

1584. Does he ignore the hundredweights and quarters, and so on, in the matter?—We do it in the way I describe, for convenience, because when a pressure is proceeding, and a workman gets to a certain point, he knows how much the vessel contains. Having applied hydraulic pressure, when he gets 425 lbs. from a thousand, he knows he has his percentage, and there is an end of it.

Mr. *James Stevenson*—continued.

1585. My point is this; without altering the basis of our weights and measures, everybody is free to use them in decimals if he wants to do so, is he not?—Yes.

1586. We are quite free as the law stands in this country, are we not, to take advantage of the decimal system?—No, because it is not legal; our Weights and Measures Act makes the use of metric weights and measures illegal.

1587. For some purposes; but it is perfectly legal to use our Imperial standards decimally, is it not?—Yes, but the difficulty in the system is, that we have a pound weighing 16 ounces, and a pint weighing 20 ounces; the two are not relative; in the other system the litre and kilo are identical.

1588. Are you aware of the doggerel that "a pint is a pound all the world round"?—Yes, and in America they had a 16-ounce pint, but they swept it away. We had a 16-ounce pint in some London Pharmacopœia I think in 1851.

1589. Are you aware that the Board of Trade provides standards for the pounds in the Imperial system?—I believe they have a large number of standards, but I do not think they have a complete set of standards in the metric system. In the Imperial system they have a complete set.

1590. Are you aware that in America they have practically abolished hundredweights, quarters, and stones?—I know they sell by the cental of 100 lbs.

1591. And that things are quoted in America at so many cents per pound?—Yes.

1592. Without any reference to hundredweights, quarters, and stones?—Yes, that is so.

1593. And it is open to us to adopt that signification, if the traders choose to do it, is it not?—Yes, but I think that would be rather half-hearted; but it is true, as you say, because I frequently have drugs invoiced from New York at so many cents per English pound.

*Chairman.*

1594. Is there any other remark you would like to make?—No, I think not.

Mr. David Howard, called in; and Examined.

*Chairman.*

1595. Are you a member of the firm of Howards and Sons, chemical manufacturers, of Stratford?—Yes.

1596. I think yours is one of the oldest chemical manufactories in the country, is it not?—I think we are within one year of our century.

1597. Are you ex-chairman of the Council of the London Chamber of Commerce?—Yes.

1598. You have heard the evidence, I think, which Mr. Umney has been giving?—Yes, and I should desire to emphasise strongly the importance of the evidence he has given as to the absolute necessity of the use of metric weights and measures in export trade. It is impossible to persuade foreigners to take our English weights and measures, and especially with regard to the weights, because the English pound is 10 per cent., roughly speaking, less than the half-kilo, which is the pound familiarly spoken of abroad. It is the legal pound in Amsterdam, and is spoken of as the livre in France, which

*Chairman*—continued.

*Chairman*—continued.

has always been the old pound on the Continent, and was very nearly the half-kilo. It was heavier than our pound, and therefore, if a foreigner receives a pound tin of something and finds that there are only 900 grammes in it, he considers that he is defrauded, naturally. Therefore, without the metric weights and measures to put up the goods, it is almost impossible to carry on trade. Only those who have worked upon them know how worrying it is to have to make a constant series of calculations. Even if, as often happens, a great many weighings are made with the same weights in the scale, there is a danger of your getting your seven weights, which are required to make a kilogramme, with multiples of the grain, wrong. But if, as often happens, every weighing is with a different weight, it is one incessant series of calculations, and troublesome calculations; because the relation is not an easy one between the kilogramme and the pound or the ounce, and there is consequent risk of error. There is no doubt about the illegality of using these kilogramme weights, and yet without them it is almost impossible to carry on export trade.

1599. Do you speak in that way from your personal experience of the export drug trade?—Yes; of the export drug trade and chemical trade, not only with regard to South America, but everywhere, all over the Levant, Japan, Germany, and France, of course, and I might say, I think, in almost all other European countries which have other systems, there is an increasing tendency to express their measures in multiples of the gramme, so that one expects to find foreign conventional weights multiples of the gramme.

1600. This matter is not a new one; it is not a question which is being raised now for the first time, is it, or that the attention of the public has not been already called to?—I think the opinion of most people was that when the Weights and Measures Act of 1878 legalised the making of contracts in metric weights and measures, it legalised the use of the weights and measures too, and most people acted on that assumption.

1601. But in your opinion it is absolutely illegal, is it, to use them for your purposes, and you do not do so?—If any one was brought before me as a borough magistrate for using metric weights and measures, I should feel bound to convict.

1602. And to fine them?—As little as was proper.

Mr. *James Stevenson.*

1603. Even for foreign trade?—Even for foreign trade. I have gone into it very carefully, and although the London County Council in fact instruct their inspectors wisely to use their eyelids, there is no guarantee that in our borough of West Ham the same thing would happen. There is no guarantee that in any other county or borough the same wise discretion would be used by the inspectors, and if they see a gramme weight in use for trade it is simply a case for discretion on the part of the magistrate, whether he fines the user 5*l.* or not.

*Chairman.*

1604. And of course that is a condition of things fatal to the use of the system on any large scale, is it not?—That is so; and yet without it it is impossible to compete with others.

1605. I presume you are aware that the disadvantages have been frequently enlarged upon by our foreign consuls, who have pointed out the difficulties from which English trade suffers on the Continent and elsewhere, owing to our present system?—Yes, they are constantly speaking of it; and I am sure that anyone who has any experience of export trade can add his own experience to that of the consuls, who speak with very wide experience.

1606. Do you consider that it is not only practically inconvenient, but that there is a serious risk of error in the actual transformations that have to take place from one system to another?—There is constant risk of error, and it is exceedingly troublesome. Only yesterday I had to reduce a large sum in kilogrammes. There were thousands of kilos and a decimal of kilos to be reduced into pounds, and it is a question of multiplying seven figures by seven figures, which is rather a troublesome process, but one which one has to be constantly doing all day long.

1607. And thus is your trade handicapped?—Yes.

1608. Do you consider that there is any practical danger in allowing the use of metric weights, with a sub-division of the kilo?—I cannot conceive any, because the half-kilo is 10 per cent. more than a pound, and the quarter kilo is 10 per cent. more than half a pound. None of the standard multiples of the gramme come at all dangerously near any standard weight, so that even if the weights were together on the counter, there would be no danger to the customer in the use of the metric weights and measures. If any one was careless enough to supply half a kilo for a pound, it would be his loss, and not that of the buyer.

1609. Do you agree with the previous witness in the opinion which he expressed with regard to the advisability of making the metric system first of all optional or legal, and after a time, compulsory?—I take it that it would be necessary to make it optional in the first place. There would be no objection raised in any office in London, to the use of the metric weights and measures, or by any one engaged largely in commerce. What the opinion with regard to the village shops would be, I cannot say; I have not been in one since I was a little boy and bought toffee there.

1610. Are you speaking now not merely of your own trade, but generally; do you think in all large dealings in connection with commercial matters, first of all the legalisation of the system, and then its compulsory adoption, would be looked upon with a thoroughly reasonable view?—I cannot imagine anyone who understands the matter really having any objection to altering our present position.

1611. Do you think there are many people who do not understand the matter?—I think there are a very large number of people who have no idea what the words mean.

1612. How

*Chairman*—continued.

1612. How would you propose to make the system known?—I think it would be necessary certainly to teach it in all elementary schools; and a very wholesome mental exercise it would be, too. In addition to being useful, it would be an admirable mental exercise to understand more than one system.

1613. You have paid some attention, from an educational point of view, to this matter, I believe?—I have been Chairman of a School Board for nine years.

1614. Then is it, in your opinion, desirable that the decimal fractions should be introduced at a much earlier period, so as to accustom the child to the question of decimal fractions?—I have no doubt about it; I cannot remember when I did not know decimal fractions; I was taught so long ago that I have no remembrance of beginning.

1615. But you were taught vulgar fractions before that, were you not?—I was taught them as part of vulgar fractions.

1616. If you were taught as children are taught usually, you learnt decimal fractions long after the more difficult system of vulgar fractions?—I think I was happy in being taught by someone who taught me to think in figures, which is not always the case.

1617. But is it not the fact that vulgar fractions are taught to children in elementary schools before they get to the decimal system?—Yes; the decimal system is treated as a mysterious thing which is not to be dealt with, except as an extra; and it might just as well be taught as part of the curriculum.

1618. Are you aware that the decimal system is taught first in almost all other countries?—Yes, I believe so.

1619. There is no reason, is there, why children should not be taught decimal fractions at an earlier stage of their education?—I cannot imagine any objection to it from any point of view, unless it be thought that it is desirable to give them as much mental exercise as possible, and therefore the difficulty of it may be considered an advantage; otherwise I should begin with decimals myself.

1620. Do you think there would be any difficulty in introducing the decimal system into the code at a much earlier stage?—I have known some hundreds of school teachers, and I have never met with one who would have the smallest difficulty in doing it.

1621. Is it done at all?—I do not think so.

1622. But you see no difficulty, do you, if the code were altered, in the general adoption of that system?—Not the slightest; the teachers are most amply able to change the exact order in which they teach; they are intelligent, well-taught and taught to teach, and there would be no difficulty from their point of view.

1623. Do you think it would meet with objection on their part?—Not the slightest so far as I can judge.

1624. And if the children once learned the use of decimals, the understanding of the metrical system would be a mere trifle, would it not?—It follows at once.

Mr. *James Stevenson.*

1625. Would it be extremely desirable that children should be taught to decimalise pounds, shillings and pence?—I think it wholesome exercise even if it is of no use. I have made calculations in pounds, shillings, and pence with a German gentleman who was in my office, who always worked in decimals, and I must say the rapidity and skill with which he worked that system was in favour of it.

1626. Are you aware that in many large manufactories and chemical works the accounts of the manufacturer, or the statistics of the manufacturer are kept in tons, and decimals of a ton, and pounds, and decimals of a pound?—I should think that every manufacturer invariably uses decimals whenever he can.

Mr. *Jasper More.*

1627. Are you aware that the cental was made a legalised weight in 1882?—Yes, I am aware of that.

1628. Should you think it would be satisfactory if the same recognition were given to the metric system as was given to the cental?—It would undoubtedly be to my mind a very wise thing to do; I think it is almost a necessity for the foreign trade, and for the home trade, I can conceive no harm that would be wrought by it; it would be of great advantage because foreign goods are so commonly brought into England according to metric weights, that it would be useful in order to check weights and so forth at once.

1629. Have the clerks in the great houses which have a continental trade any difficulty in translating the foreign weights into our English weights; have they much difficulty in doing it where they have vast numbers of things coming in?—No; it is only a great waste of time.

1630. I suppose there is no ready reckoner between the two systems, is there?—There are rough approximations; a ton is a little more than a 1,000 kilogrammes, and therefore we speak of a 1,000 kilogrammes roughly as a ton, but a ton is 1001·6 kilogrammes really.

1631. Two-thirds of the food of the country is imported, and when it comes to this country it is translated at once into the English weights and measures; if the Custom House authorities do not have any difficulty in doing that, why should the large houses have any difficulty?—But I think it is re-weighed as it arrives. All the goods that I have any experience of are invariably re-weighed on arrival, because there is loss on shipment, and therefore it is actual re-weighing, not a translation.

1632. Are you speaking of heavy goods?—Yes. A kilogramme is two pounds three ounces and a fraction, and for a good many purposes one speaks of it as two pounds three ounces, but in commercial affairs on a large scale one has to be very accurate indeed; one per cent. is not to be thrown away in these days.

1633. If you recommend the teaching of the children the metric system as a means of popularising it, how would you deal with the adult population?—I think those who have been taught any arithmetic would apply it without any difficulty. I never met with a clerk who could not work decimals; I have met with a good many who could not work practice.

Mr. *Jasper More*—continued.

1634. But you said just now a large portion of the population did not understand what the metric system meant, which is perfectly true; how would you propose to familiarise them with it?—I think any one who is brought into contact with commercial matters would learn it readily, but, as I say, with regard to the village shop, I do not know anything about it.

1635. What would you think as to the customers at the village shop?—That is what I mean; I do not know that I can fathom their powers of arithmetic.

1636. Would you change the nomenclature; do you think it would be possible to do that?—It is very difficult to change, and I think it would be disadvantageous, because in commerce it would be extremely inconvenient to have two names for the kilogramme, for instance.

1637. Do you not think that the foreign nomenclature would be a great objection to it, to the uneducated mind?—There would be no reason why a half kilogramme should not be called a pound.

Sir *Edward Hill.*

1638. I take it, that in your opinion, the present system of weights and measures is cumbrous, inconvenient, and sometimes even dangerous?—Undoubtedly.

1639. And in your opinion it is a distinct disadvantage to the trade of this country to be out in the cold when all other countries have adopted an easier and more intelligible system?—Undoubtedly, even if it be not a great disadvantage to our inland trade to have our very cumbersome system, it is a very serious disadvantage in anything where the English trade touches the foreigner.

1640. Is that disadvantage increasing every day, in consequence of the fact the few countries who had not previously adopted the metric system are now rapidly adopting it?—Undoubtedly; when Germany had a great variety of systems of money, one gave it up as hopeless in endeavouring to understand them. Now there is a single system which one must understand; just in the same way every cumbersome system of local weights and measures which is given up, is an additional argument in favour of the metric system.

1641. Is it your opinion, that if we do not adopt the metric system, our trade will seriously suffer?—Undoubtedly our trade will suffer.

1642. As regards the educational part of the matter, as Chairman of a School Board, do you consider it to be a great waste of time to muddle

Sir *Edward Hill*—continued.

the children's heads with our present system, when a much simpler one could be taught them?—I certainly can only regard it as a severe form of intellectual gymnastics which we put them through, and unless it is regarded in that light, I can see no use in it. Seriously, it is not the particular kind of gymnastics I should propose for them if I had the choice.

1643. You would endeavour to find some other set of gymnastics, which would be of more practical utility, would you?—Yes; that is the only merit I can conceive in the present system.

1644. As regards the shopkeeper and the smaller class of traders, do you think such customers who went to purchase toffey would experience any difficulty in regard to a new system?—They would probably begin to think in a sort of mixture of the new and old, as they do to this day in France, where they tell you that the price of anything is so many sous per half livre. They can all be translated into the metric system, which ours cannot.

1645. You probably would not make this new system compulsory at once, would you?—I am afraid the customers of the village shop would be very difficult to deal with if you did so.

1646. You would allow probably some time for the adoption; you would immediately legalise the use of the metric system, teach it compulsorily in the schools, but you would allow some time before you insisted on its use by the public?—Undoubtedly; we have the great disadvantage in England that our pound and foot do not fit in with the metric system as the foreign pound and foot did; that is the great advantage they have abroad.

1647. Of course there is always a difficulty in making any change, but have you any reason to suppose that our countrymen would take any longer in their present state of education to accustom themselves to a change than the inhabitants of other countries?—From what I have seen of the French peasantry I should certainly think not so long.

1648. You do not put the intellect of the British nation at a lower point than that of the Germans or French, or any other foreign nation, do you?—As far as my knowledge goes certainly not.

1649. Not even the Japanese?—I do not know enough of the Japanese mode of thought, but as far as the European countries go, I should certainly say the English were as intelligent as the average foreigner.

*Tuesday, 7th May* 1895.

MEMBERS PRESENT:

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| Sir John Barran. | Mr. Jasper More. |
| Mr. Alban Gibbs. | Sir Henry Roscoe. |
| Mr. Godson. | Mr. James Stevenson. |
| Sir Edward Hill. | Mr. Webster. |
| Sir Samuel Montagu. | Mr. Wrightson. |

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. FRANCIS HUBERT LENDERS, called in; and Examined.

*Chairman.*

1650. YOU, I believe, are a member of the firm of F. Lenders and Company, of Bishopsgate-street Within?—Yes.

1651. You also have houses at Liverpool, Odessa, and Krehl, I believe?—Yes.

1652. You are importers and exporters of grain and oil seeds, are you not?—That is so.

1653. Are you acquainted with the decimal system and metrical system of weights and measures as used on the Continent?—Yes.

1654. Do you, in your trade, actually use metrical weights and measures in England?—No, we sell everything on the decimal system abroad, by the 100 kilos, or the 1,000 kilos, but we buy here on the ordinary English basis of so many pounds. Some wheat is sold per 480 pounds, other per 492 pounds, and other per 500 pounds. We buy in English weight and English money here, and we sell on the Continent in foreign weight and foreign money.

1655. Then I suppose you have to keep a certain number of clerks employed in drawing up your invoices, and adjusting the differences between the two systems, and so forth?—At the start you had to do that, but we have now tables calculated for all the different exchanges and the different comparisons, and when we get an order to buy a cargo in so many francs per 100 kilos, or so many marks per 1,000 kilos, we have our calculation tables at the exchange of the day, showing so many shillings, so that we do not lose much time; but at the beginning there was a good deal of time wasted. You never have them absolutely correct unless you make them at the time you do the business, because the comparative tables of the different currencies one has are taken with 2½ centimes difference in the exchange, whereas if the exchange is only 1¼ there is something either *pro* or *con*.

1656. That is rather with regard to the exchange of coinage than as to the question of the weights and measures, with which we are more specially concerned here?—There is a firm basis for that. For instance, the English cwt. is represented by 50¾ French kilos.

*Chairman*—continued.

1657. Do you in your business find any inconvenience from the fact that we in England employ a different set of weights than those employed in the countries with which you deal?—It is so far inconvenient that those who are not initiated into it find it very difficult to unravel, and lose a good deal of time over it. As a matter of interest we prefer it, because what is everybody's knowledge the man who deals with it cannot profit by.

1658. Would it ease you in your business and be a more satisfactory result for you if you were dealing in England with the metrical system in the same way that the continental countries do?—It would ease us very much indeed.

1659. Would you be, therefore, in favour of a change?—As a general policy, yes.

1660. Do you think there would be much objection in your business or on the part of the people engaged in your trade, to first of all a legalisation of the use of metrical weights and measures, and subsequently to an alteration in the law, for example, approximating the system or making it identical with the systems in use abroad. Do you think there would be much objection to such a change?—I do not think those who are engaged in the same trade as I am would have any objection at all; in fact, they would all be in favour of it.

1661. Do you think there would be practical objections among the working people, or clerks, or persons engaged in your business?—No, they would be able to grasp the decimal system so much sooner than the present complicated system that they would like it.

1662. Have you any doubt that the system is a much simpler one?—Not the slightest.

1663. Do you deal with Russia?—Yes; I have a house in Odessa.

1664. What is the system there in vogue?—The system there is that the price is made per pood, and the pood is 40 pounds Russian weight.

1665. That does not approximate, or is not identical, is it, with the system in use in Germany and

*Chairman*—continued.

and France?—No; the system in Germany and France is the decimal system.

1666. Have you ever heard from your experience in the Russian trade that there is any desire on the part of the Russian merchants to adopt the same system that other countries in Europe have adopted, namely, the metrical system?—Not that I am aware of.

1667. You have not heard that there is any desire on the part of the Russian people or Government to make any arrangement of that kind?—No. Then the Russian system is only partly that, because the currency is decimal, the rouble is 100 kopecs.

1668. Have you any other remark to make with regard to the weights employed in your trade on the London market?—If this country were to adopt the same weights that are adopted on the Continent generally, we would have to adopt the kilo of 1,000 grammes, but if we stuck to the English pound as it is now, it would be handier to have one designation for 100 lbs., one for 500 lbs., and one for a ton of 2,000 lbs., because the ton of 2,240 lbs., as now, is a very complicated affair.

1669. You would make the lb., I suppose, identical with the half kilo?—Yes; that is what they do in Germany.

1670. Would you call it a lb. or a half kilo?—I would call it a lb.

1671. What would you call the ton?—The ton they call a ton of 2,000 lbs., 1,000 kilos.

1672. And the cwt.?—They call the cwt. a centner; they usually deal in metric centners.

1673. Do you think that some such system could be adopted without detriment in your trade?—Certainly.

Mr. *Alban Gibbs.*

1674. Can you tell the Committee how it has arisen that there are different weights, such as 480 lbs. and 500 lbs. for different things?—No; I do not know the historic origin of the different English weights, but I believe they must have arisen more or less through the nature of the grain; that the wheat of certain qualities that is sold by specified weights approaches most to that weight which has been fixed for the quarter.

1675. Referring it to some particular measure, in fact, not to a weight; that is to say, 480 lbs. of one wheat would fill a measure, whereas it would take 500 lbs. of another kind of wheat to fill the same measure?—I take it that must be the origin of it.

1676. In your trade do you think that in the corn market generally, if this measure were made legal, it would be adopted willingly?—No.

1677. Do you think they would have to be forced to adopt it?—I think so. I think there are a great many small interests that would fight for having the old system kept up.

1678. That would not be with people in a large way, like yourselves, would it?—No.

1679. But with the small merchants?—The large purchaser buys by one weight and likes to sell by another.

1680. For the purpose, in fact, of keeping their dealings dark, more or less?—Yes, as much as possible.

1681. Therefore, you think that they would dislike it, do you?—I think so.

Mr. *Alban Gibbs*—continued.

1682. Do you think, as far as the public is concerned, it would be a distinct benefit?—An immense benefit.

1683. That a person could look in the paper and see what wheat really did cost and know what he was paying for it?—Exactly.

1684. But he cannot do that now?—He can do it now if he takes the trouble.

1685. But he has to do a great many sums and has to have a great deal of local knowledge which very few people who are not absolutely in the trade have?—Quite so.

1686. You say the Germans sell by the double centner; that rather means that they are adopting the kilo instead of the lb., does it not?—It means this; it is more difficult to fix a price, and go into fractions, when dealing with a small quantity, than when you deal with a large quantity. The French do everything by the quintal of 100 kilos and the Germans do very much the same, although their legal centner is 50 kilos.

1687. They started with taking a lb. instead of a kilo, did they not?—Yes.

1688. Do you think they would have done better if they had started by taking the kilo instead of the lb.?—There is such a small fractional difference between the German lb. and the half-kilo that it certainly would have been better if it had never been used, but in an article like grain the difference is so small that no value can be fixed to it.

1689. Would the difference between our lb. and the half kilo be equally small, or would it be larger?—No, your lb. is 450 grammes, and the German lb. is 500 grammes. The half kilo is also 500 grammes.

1690. Then the German lb. and half kilo are really the same?—The English ton of 2,240 lbs. is 1,015 kilos, French, and it is 1,016 kilos, German; that is the difference, so that if you come to calculate it up on a lb. or a kilo, it is merely imaginary. It might, of course, have a value for gold or silver, or any precious metal, but not for grain.

1691. You would recommend, I take it, the French metrical system, would you not?—As being the most generally adopted, yes.

1692. In preference to making a decimal system of our own, founded on our own lb.?—I should say so.

1693. Though you would much prefer that than our present system?—Certainly; even that would be a great progress.

Sir *Samuel Montagu.*

1694. You spoke of the pood in Russia being 40 lbs.; what is the divisional part of the pood?—The pound is the divisional part of it.

1695. Is it decimalised?—No; the smaller weight is the pound.

1696. You spoke of the German pound being different to the half kilo?—Yes, very slightly.

1697. Does that apply at present?—No, it does not apply at all, because if you buy a cargo of grain, for instance, you can send it to France or to Germany at the same price; it is weighed out by either weight, and it makes no difference.

1698. I am not speaking on that point; to my knowledge the German half kilo is precisely the same

Sir *Samuel Montagu*—continued.

same as the French?—In dealing in silver, for instance, the weight is absolutely identical at the present time, and has been for the last 20 years; where does the difference arise, do you say?—I believe that the standard weights deposited in Germany differ very slightly from the standard weights deposited in Paris; very, very slightly.

1699. But not to the extent; you say one per mille; you are talking of 1,015 being equal to 1,016, but I think on inquiry you will find that the weights are absolutely identical?—I can only say what we do in our trade.

1700. Is it a trade allowance?—No, we adopted it in that way; we take the weight for Germany 1,016, and for France 1,015, but very likely the absolute difference is somewhat different to that, only it would not do for a trade like the grain trade, to go into such small fractions.

Sir *Edward Hill.*

1701. I understand from your evidence that, so far as your experience in the grain trade goes, it would be an advantage to the public to have the metrical system notwithstanding that there may be at first some objection to it?—Certainly; the public would certainly like it, and I think it would be an advantage to the public.

1702. And it would be no disadvantage to yourself, would it?—That is a question which would be only secondary; as far as I am concerned personally, I am perfectly well satisfied with the system as it is.

1703. But you have no objection to the other, have you?—No.

Mr. *Webster.*

1704. I understood you to say that you thought that some small purchasers in your trade might object to it to some extent?—That is my opinion, but I have no real experience in that trade; I only deal in the import and export of cargoes and my experience is really more with foreign countries. I have no dealing with the inland dealer, but my impression is that some people would rather prefer going on as they are.

1705. What foreign countries have you principally dealings with?—Germany, France, Belgium, Holland, Russia, and to some extent the Argentine Republic, California, and Australia.

1706. The metric system was adopted recently in Germany, was it not?—Yes, but still it was adopted there some 30 or 40 years ago, I think.

1707. But more recently in Austria, is not that so?—Yes, more recently in Austria.

1708. Do you know if they found very much difficulty in the change from the old system to the new there?—No, I think not.

1709. Do you think that it would be a very great advantage to the purchaser?—No; it would simplify the trade; it would make it more easy of understanding generally speaking. If everything goes on the same level you know exactly where you are. If you have first of all to go into a calculation; if you are very familiar with the trade, you see at once what the difference is; but if you are not, it is sometimes difficult to find it out; you have not time or are not disposed to find it out, and you let things go on as they are.

Mr. *Webster*—continued.

Mr. *Jasper More.*

1710. Should you think it sufficient if this Committee reported in favour of adding the metric system to the statutory system, as was done in the Bill of 1888 with respect to the cental?—I do not think the simple recommendation would lead to its adoption; I think it ought to be made compulsory.

1711. I thought you said just now that the smaller people would not stand it?—They would have to do so if it was the law.

1712. Do you think the dealers in America would stand it?—I believe opinions among them differ, from what I have been able to gather from some of them.

1713. Is not the feeling generally strong against even the cental?—I believe there is some feeling against it in some quarters, but even the cental is already an improvement, and it simplifies matters a good deal.

1714. But the cental was added to the statutory measures by that Act; would it not be sufficient for your purpose if the metric system was treated in the same way?—I do not believe that it would be generally adopted unless it was made compulsory.

1715. What metric system would you make compulsory?—I would prefer to have the French system, because it is a very easy system.

1716. You say you would prefer a system of our own to a foreign system?—No; I said if you did not adopt the foreign system it would be a very great progress to adopt a system of our own on a decimal basis; I would prefer a foreign system, and I would prefer the French basis, that is to say, the identical French kilo, because Italy, France, Belgium, Holland, all have the kilo, whereas Germany differs so slightly that it is not worth mentioning.

1717. Have you any opinion to express as to how any new system could be made compulsory?—That is very difficult for a foreigner to say with reference to a country like England; when those things are done abroad there is simply a law passed that no one shall sell in any other way than by such a weight, and there is an end of it; then all the weights and measures are controlled by the officials the same as the Excise does here, I believe, and no other weights are allowed to be used.

1718. Do you suppose that would be stood in this country. You have not sufficient acquaintance with this country to form an opinion, I suppose?—I should not like to give an opinion upon that; of course the law must be obeyed here as elsewhere.

Mr. *Stevenson.*

1719. Is it not legal now to sell grain in this country by anything except what are called the legal weights, the bushel and so on?—When the Act of 1888 was introduced it was enacted, I believe, that the quarter should be used only as a measure; before that time all contracts in the

Mr. *Stevenson*—continued.

grain trade, although the price was fixed by weight, were carried out per quarter of 480 pounds per quarter of 492 pounds, and so on, and then when the use of the word "quarter" became illegal, we introduced the word "unit" for the purpose of the trade, and we now deal in so many units of 480 pounds, or 500 pounds, or whatever the weight is, so we altogether evade the law in that way.

1720. Still you use legal weights, and you say you take so many of them?—Certainly, we use the pound.

1721. I see from an extract I have here prices quoted at 10*s.* 3*d.* per 304 pounds for oats?—Just so.

1722. Why 304 pounds?—That is one of the anomalies; if you take a list of the different denominations of what used to be the quarter, you get oats at 304 pounds, and 320 pounds, barley at 400 pounds and 424 pounds; you get linseed at 416 and 424 pounds, and you get all manners of weights.

1723. Then do I understand these weights are the average weight of a quarter, and that the weight is adjusted to what a measured quarter would weigh?—Just so; the price by which you buy or sell is based upon the number of pounds there given quite irrespective of what the measure may weigh.

1724. Then I see beans are quoted at 21*s.* 3*d.* to 21*s.* 6*d.*, but it does not say per what?—That would be per 480 pounds.

1725. Then each particular grain is sold at the average weight per quarter?—Yes.

1726. Then of course parcels of grain vary; some weigh heavier per quarter than others?—Exactly.

1727. How is that taken into account?—Because you pay by the weight received; you do not pay by the measure.

1728. They are all actually weighed, quoted in weight, and delivered in weight?—Just so.

1729. If a grain weigh light, I suppose it is not so valuable as a grain which weighs heavy?—Certainly.

1730. And that is adjusted in the price, is it?—Yes, that is so.

1731. I see at Liverpool all the quotations are per 100 pounds?—Yes, Liverpool has adopted the cental for all its business in grain.

1732. Wheat is also per 100 pounds at Liverpool, is it not?—Everything.

1733. And maize the same, because they give the numbers of centals sold on that day on the market. I see flour is a different weight, it is 280 pounds?—Yes.

1734. Are all those variations in strict accordance with the law?—It seems so, because the pound being a legal weight I suppose we must be at liberty to make our bargain per as many English pounds as we please, or as is convenient to us.

1735. Then I presume these various weights are found to suit the convenience of trade?—At the present moment, yes; but where, as now, you have a different weight in almost every market, it would certainly facilitate and simplify matters very much if there was only one weight for the whole country.

Mr. *Stevenson*—continued.

1736. But that is the case now, according to law, is it not?—That is so, you have a pound which is the same pound.

1737. If people will not obey the law now, how will they obey it if the unit is changed. At present we all know what a pound weight means, and you all know how many pound weights go to make up a quarter for beans, and oats, as the case may be, do you not?—Just so.

1738. Everybody knows what they are doing if they choose to calculate; how would you improve matters if you abolished the use of the word "pound" and substituted the word "kilogramme" instead?—Instead of having a price per 304 pounds, per 320 pounds and per 400 pounds, and so on, I should have one price per 100 kilos, or per 100 pounds, and I should have all quotations obligatory by that quantity; the consequence would be instead of having to go into a calculation as to what 480 pounds in London meant as compared with Liverpool or some other part of the country, I should have it in the same line.

1739. But if the Liverpool system were made compulsory in every place in the kingdom, would not that give you the same uniformity as you suggest?—As long as you have a uniformity it does not matter which you take.

1740. Are you any more uniform by calling a parcel 1,000 kilos than by calling it 1,000 pounds?—As long as the pound comes near the kilo, certainly not, and in reality, if you took this country by itself, it would be sufficient to have uniformity for the purposes of this country only.

1741. When you ship a cargo of grain at a foreign port you have a bill of lading, of course?—Certainly.

1742. How is the quantity declared in that bill of lading?—By the weight or the measure which is in use in the foreign country where it is shipped, as in Odessa so many poods. We have a conventional reduction inserted in the contract upon the basis of which the Russian weight is converted into English weight.

1743. You take care when the vessel arrives, do you not, that you get as much grain as is represented in the bill of lading?—Yes.

1744. If you land that at the docks here you forget all about the poods and land it in English pounds, do you not?—That is so.

1745. Then what is the difficulty in having a different weight in Russia than we have in England?—The difficulty is in the labour, the difficulty to those uninitiated in the trade in understanding what the equivalent is.

1746. You land the cargo in buckets, I presume, pass the buckets over the scale, which registers the weight in English pounds, or the cental, whichever it may be?—Certainly; but if you, as a non-trader or a member of the public, weighed the Russian quantity of poods, it would be difficult for you to make out what was the equivalent of that per 480 pounds English.

1747. Is it not your business to tell them that?—That is why we are satisfied with the present system, because it is our business, and we make our living out of it.

1748. But in foreign countries where the things differ, must you not have an intermediate person

Mr. *Stevenson*—continued.

person to do all that?—We are in the habit of going to these places, and get to know sufficiently to correspond with the people in their language and they with us, so that we do not require any intermediate person.

1749. You do not all speak English, do you?—No, fortunately not, for the same reason.

*Chairman.*

1750. Because people do not speak the same language, it is no reason why they should not have the same weight, is it?—If you ask me whether it is in the public interest that it should be so, I should say yes.

Mr. *Wrightson.*

1751. I suppose it is quite clear in your mind that, to the public, the simpler the matter is the better for them?—Undoubtedly.

1752. But, so far as the seller is concerned, it is conceivable that it might be to his advantage that it should not be so, so that he would not have so much competition?—It does not matter whether you are a seller or buyer as long as two parties dealing together have equal knowledge of what they are doing; it is much more difficult for one to impose upon another then than it is when one has more knowledge than the other, that is the question.

Sir *John Barran.*

1753. I suppose I may take it if the metrical system were adopted in England those who trade with us from the countries where that system is now in existence would have rather less difficulty in trading with us?—I believe so.

1754. Would not that tend towards increasing their confidence in us as a trading community, because they would know at once exactly where they stood in relation to that which they sent to us?—They would become certainly much easier acquainted with the English trade, and the more you are acquainted with a business the more you get confidence in it, and the more easily you do it.

1755. And the more likely they are to do trade with us than to do trade with countries which use their system of weight and measurement?—I think so.

1756. You said that in all probability those who were pretty well acquainted with the system had some little advantage occasionally in consequence of their knowledge of the system, and that they did not care so very much about the thing being made very plain?—That is so.

1757. I suppose that applies even to our system of various weights and measures in connection with the corn trade in this country?—Certainly. If you know that you can very easily be controlled, you are not so bold as when you know you cannot be so easily controlled; that is simply human nature.

1758. Therefore, when the thing was made clear and plain generally, there would be very much more protection to those who were comparatively ignorant, would there not?—Certainly.

Sir *Samuel Montagu.*

1759. Are you acquainted at all with the period of transition in Germany of the weights and measures and money, and how long it took to overcome the difficulties arising from it?—I believe in Germany it was done gradually; it was partly done at one time and partly at another time.

1760. Were you there at the time; do you know personally anything about it?—No; I only lived in Germany to learn the language; that was all.

1761. You mentioned in one of your answers that the grain was shipped according to the weight of the country of the sender?—Yes.

1762. Do you experience difficulties in transferring cargoes to countries where the metric system is in force with regard to re-weighing or transferring the weights?—No; we have in all contracts an admitted basis between buyer and seller upon which the weights shall be converted from one to another.

1763. We have been told that in some countries like Bulgaria, if you do not state the cargo in kilos, they re-weigh it at the expense of the shippers; do you know anything about that?—I have never heard that.

1764. Would it be inconvenient to you to send to this Committee an enumeration of the different weights which you use in your trade in your markets?—I can do that easily.

*Chairman.*

1765. Do you think it would be advisable supposing the Committee were to recommend anything about the adoption of this system, that that adoption should be made compulsory at once, or would you give a certain length of time during which the systems should be run side by side, both being legal?—I believe that it would be better not to enforce it immediately, but to leave a certain time for people to prepare themselves for it.

1766. Have you ever thought how long a time should be given?—I should say not more than 12 months.

Mr. JOHN SHUKER, called in; and Examined.

Mr. *Jasper More.*

1767. ARE you Secretary of an association for trying to obtain uniformity of weights?—I was Chairman of an association for that purpose.

1768. What was the nature of that association?—It was for collecting information throughout



Mr. *Jasper More*—continued.

England as to the desirability of making one uniform weight throughout the whole country.

*Chairman.*

1769. For what purpose?—For the sale of corn principally.

Mr. *Jasper More.*

1770. Are you connected in business with Liverpool as well as the kingdom generally?—Yes, considerably as a corn merchant.

1771. What was the general result of the replies which you received to your questions?—The general replies were that in nearly the whole of England there was a general wish that a uniform system should be made legal throughout the country; of course there was a difference of opinion as to what standard should be fixed.

1772. What was the preponderance of opinion?—As far as I could gather, having replies from 67 representative bodies, the whole of the Chambers of Agriculture in association with the Central Chamber, and several other similar institutions, about 75 per cent. appeared to be in favour of the hundredweight and the ton as a standard; the remaining 25 per cent. had various local weights of their own.

1773. Did you find that the cental was in much favour?—No, the cental was not in much favour. The parts of the country that objected to the hundredweight, I may say, was the extreme west, Cornwall, and the Eastern Counties; barring those places nearly the whole country were in favour of the hundredweight and the ton.

1774. They have very remarkable weights in Cornwall, have they not; do you remember how many pounds weight they have to a bushel there?—There are 120 pounds to the bag, and there are two bags to the sack. There is a good deal of that sort of thing which I do not remember.

1775. What parts of the country were most opposed to the hundredweight, the parts adjoining the sea or inland?—The Western Counties, Cornwall especially, and the Eastern Counties; in the whole of the Midlands and the North they were almost unanimously in favour of the hundredweight.

1776. What is the system in the Eastern Counties?—They appear to sell barley by measure, and other weights vary. Wheat, I think, is generally sold by weight.

1777. Have you heard that there has been any change in that respect?—I have heard that they have adopted weight a good deal since the time we were there. I may mention it was market day at Norwich, and after our meeting with the Norfolk Chamber, I and my friends went into the corn market. We spoke to several of the dealers there, and inquired what object or advantage there was in buying and selling by the comb measure. They said that it was nothing beyond sentiment and practice; some went so far as to say that the farmers were very silly, that they thought they had an advantage.

1778. Have you heard that they have undergone a change in their practice since that time?—I have heard so. I have heard that they sell more by weight since then.

1779. Did you hear anything about the metric system during your inquiries?—Hardly anything.

1780. Do you think the people you communicated with would stand a complete alteration of the system?—There would be a very strong objection to it, I think.

1781. How long do you think it would take for them to get used to it?—It would take the

Mr. *Jasper More*—continued.

farmers and the country people a very long time. Of course, the commercial and trading people, I can understand, would get into the practice very readily, that is those who are daily engaged in weighing and measuring; but to farmers who have only one transaction a month it may be, it would be very awkward indeed.

1782. What do you recommend should be done in order to ensure uniformity?—Uniformity would be very desirable, I have no doubt, but so far as I know, it should go upon the cwt. and ton standard which is thoroughly well known all over the country.

1783. But you are aware, are you not, at present that the cental is a legalised weight as well?—Yes.

1784. Would you keep two or only have one weight?—It would be far better to have only one. For instance, I buy Indian corn by the cental in the Liverpool market. It is carried for me a long distance by the ton; I sell it at per 240 lbs., which is a very complicated thing. 20 sacks of that weight make the unequal total of two tons, two cwt, two quarters and 24 lbs.

1785. Do you think county councils would have any influence in carrying out any alteration?—They may, but I am afraid their opinions might differ in the different localities or counties.

Mr. *James Stevenson.*

1786. When you say in some places they sell corn by a measure, do you mean they quote the prices by measure?—Measured weight it is really.

1787. Then the operation of measuring does not take place; it passes over the scales, does it?—It passes over the scales and is not measured at all so far as I know.

1788. Are bushel measures, for instance, used in any corn market for the actual delivery of grain passing from one hand to another?—Not that I know of; weight is so much more simple and less liable to error.

1789. Then what is described as the advantage of selling by weight instead of by measure is now done, as far as the actual operation of ascertaining the quantity is concerned. What you want is, is it not, that the price quoted shall be by weight with an intelligible number of pounds; is not that so?—Yes; what we say is that weight is much more quickly done and it is far less liable to error. No two men can measure a sack alike.

Mr. *Godson.*

1790. Do not you generally fix a weight to a bushel, say 42 or 44 lbs., according to the size of the grain?—Yes; that has been so, but as a matter of fact it is not measured.

1791. But it is taken as such, is it not?—It is taken as such.

1792. Although it is a measure you actually get the weight in that way, do you not?—Yes.

1793. When you made these inquiries all over England, did you put the metric system to the people at all, or left them to say whatever they pleased?—Perhaps I ought to say that about four years ago, myself, Mr. Jasper More, and a few other gentlemen took up the question of the complication of weights; we held several meetings first

Mr. *Godson*—continued.

first of all, to decide what weight would be the most acceptable, and it was generally put between the cental and the cwt. It was found that the cwt. was most in favour. Then we called a large conference, a very important conference, at Shrewsbury, where representatives attended from many counties, and there the cwt. and the ton was adopted. After that we put that weight forward.

*Chairman.*

1794. When was this meeting held?—Nearly four years ago. When we thoroughly adopted the cwt. we got out a circular and sent out a large number to agricultural associations.

Mr. *Godson.*

1795. Looking rapidly through it, I do not see anything about the metric system here?—No, we adopted the hundredweight.

Sir *John Barran.*

1796. I suppose you find that the calculations you have to make in connection with your purchases in Liverpool per cental are much easier made than those by the cwt.?—It would be very much easier if we bought, sold, and carried, and all by the same weight.

1797. If you had a general principle, do you mean?—Yes.

1798. No doubt it would be very much easier for the uneducated to make their calculations?—No doubt about it.

1799. Therefore, do you think, under those circumstances, it would be desirable to adopt the cental rather than the cwt., taking that into consideration?—It would be very desirable to adopt one standard of weight; but I feel sure the country portions, as distinct from the trading public, would strongly object to the cental as being an entirely new weight in their opinion.

1800. Do you mean something new to which they are not used?—Yes; new and strange.

1801. But I suppose you would conclude that in a very short time they would get so used to it that they would like it better than the old system?—They would come to it in time.

Sir *Samuel Montagu.*

1802. I understand that the date when you made all these inquiries round about the United Kingdom was about four years ago, or was it more?—It was three to four years ago when I made those inquiries.

1803. You are aware, I suppose, that the great bulk of imports in grain is from countries where they use the metric system?—I believe that is so.

1804. Do you think it would be very difficult for an English farmer to understand that a thousand kilos would be equal to a ton as near as possible; would that be a great change?—It would, I think, with regard to small quantities. I think it would be of great advantage if they were given in larger quantities, such as tons. If I buy 240 centals of corn, which is somewhere about 11 tons, it would look more simple if it was bought by the ton.

1805. But supposing the new ton was really equivalent to 1,000 kilos, which are about a ton and 15lbs. over, would it make a great difficulty



Sir *Samuel Montagu*—continued.

if they had a ton a shade heavier than the present ton?—No, when it came into practice; but it would for a time.

1806. Have you found that there is a great difference in opinion in the country with regard to the weights and measures, and that if any one system of English weights and measures was adopted there would be people objecting to it?—The cwt. and ton is very well understood all over the country, and this would be most acceptable.

1807. But, still, you say in Cornwall and Norfolk there were objections raised?—They preferred their own local weights.

1808. Do you not think it would be an advantage in every way if this country were to brush away all these divers weights and measures and to have the same weights and measures as the rest of the world or the rest of Europe?—It would be a very great advantage to have one system, no doubt.

1809. If we made so important a change, do you not think it would be better to do the thing thoroughly and have the same weights as France, Germany, and, if America were to follow that, all the world should have the same weights and measures as ourselves?—Opinions differ; I should not say so. I think it is very desirable to move step by step

1810. We find that the rest of the civilised countries are adopting the metric system; and if ours, as you acknowledge, be a complicated and difficult one over the country, would it not be much better to have the simpler system which prevails abroad?—It may be better, and I believe it would be in the end; but it would be a tremendous change and disturbance to trade.

1811. Do you think if the system were taught at the Board schools all over the country, in a reasonable time it would be generally understood in this country?—I should be doubtful about that.

1812. Do you put the intelligence of the people of this country below that of the Germans, or Swedes, or French?—I hope not.

1813. And if you found that the Germans have gone through this change, and are very glad that they have gone through it, would not that be an argument in favour of our trying it?—Yes; no doubt it would be an argument in its favour.

Mr. *Wrightson.*

1814. What is the weight which you spoke of as 240 lbs.?—It is a weight by which Indian corn is sold a great deal in many country districts; not generally, perhaps, but in all our parts.

1815. You say that it would be better to take two steps in making this alteration than to do it in one; what do you mean by that; there would be as much effort to make people adopt your proposals, I take it, as there would be if you made the larger proposal?—My meaning was that to make one weight uniform, and that that should be a weight thoroughly understood, would be more desirable than making a change of a new weight as well as a universal weight at the same time.

1816. But if a change has to take place, is it not as well to make the change complete at once,

Mr. *Wrightson*—continued.

and take the metric system as a whole?—I should not think so myself.

Sir *Edward Hill.*

1817. Supposing it were deemed desirable to introduce the metric system into England, is there anything in the nature of grain which calls for different treatment?—No, I should not think there was.

1818. Then do I take it that you are not satisfied at present with the curious ways in which grains are sold?—I am not at all satisfied with the present way.

1819. Do you think it is a hindrance to your business to have to be supplied by one weight, to have it carried by another weight, and then sell it by a third?—I should say I think that it is no great evil to people who understand their business, who have tables and daily practice to guide them, but it is a great expense to people who have a few transactions, such as farmers and country people.

1820. The system of having three different sets of weights to deal with in one transaction, I may take it, is naturally condemned by you?—Yes, it is.

1821. And you would wish to alter it, would you?—Yes.

1822. Then it becomes a question, does it not, as to what particular system you will adopt?—Yes.

1823. Do you not see very considerable advantage in adopting a system of weights and measures which is in accord with the system which largely prevails over the whole world?—It may be an advantage, in the end, if we discard our own weights and take to French ones altogether; I do not deny that.

1824. You told the Committee that you thought a change ought to take place, but it was a question of the change?—Yes.

1825. Then I ask you, admitting a change has to take place, whether you do not think it would be a great advantage to adopt a system which is in accord with the system which prevails nearly over the whole of the Continent, and is the system by which, to a very large extent, grain is bought?—I am very strongly in favour of what I suppose is considered the standard weight of the country, the cwt. and ton, which all carriers use, by which public and private weighing machines are adjusted, and by which everything is conducted.

*Chairman.*

1826. The honourable Member does not wish you to understand that he is suggesting there should be one unit for corn and another for other objects of sale, but he is suggesting to you that, instead of using the cwt. and the ton, that we should adopt what is called the metric system, which is adopted now by almost all civilised countries throughout our different trades; not that we should have one weight for corn-dealing and another for other articles; I think you, perhaps, misunderstood what the honourable Member meant?—For Railway Companies and everybody else; yes.

Sir *Edward Hill.*

1827. I think I understood you to say that there was nothing special about grain which demanded different treatment to any other commodities?—I do not think there is.

1828. Then the only difficulty you see is that you think the farmers who have occasional transactions might have some little trouble?—Yes.

1829. Have you taken into consideration the great spread of education which has taken place during the last few years?—Well, they would have one transaction in a fortnight, perhaps, and they would require, I suppose, fresh weights.

1830. That is all detail?—For the trader it would be a mere trifle, but for the person who only used his weights a few times a year it would be of some importance.

1831. But do you, for the sake of the stupid farmer who could not understand the alteration in the weights, think the whole trade of the country should be inconvenienced; do you really think, looking at the fact that this change has been made in countries where the weights and measures were even worse than you describe they are for grain, and that they have been adopted without any great amount of trouble, there would be any special difficulty in this country?—My opinion is, so far as I know, that the decimal system, when established, would be a decided improvement, but it would be a great disturbance to trade no doubt.

Mr. *Webster.*

1832. I understand you are strongly in favour of some uniform system?—I am.

1833. With regard to this conference you told us about, were the men who attended it mainly men who dealt in home produce or in English weights and measures, or were they men who bought their corn abroad?—They were principally men who dealt in home produce.

1834. So that they could not look at the question from a general point of view, but solely from what I may call an insular point of view?—Yes, that would be so.

1835. The people who were against the uniform system were those in Cornwall and the East Coast, I understand?—Yes.

1836. What was their reason for being against a uniform system?—Because they had a very strong sentiment in favour of old practice, I suppose.

1837. They were rather too conservative, in fact, were they?—Yes.

1838. They believed in the retention of the old measure called the comb, I believe, did they not?—Yes, in the Eastern Counties.

1839. Do you not think it would be much better, if we had to make a change, to have a uniform system which would be not only of advantage to the farmers, but to every trader in the country in the way of increasing our trade throughout the world?—I am only afraid it would be too sweeping.

1840. But you propose a change from combs to tons; is there any reason why you should not have the centimetre or some measure of that description?—The difference, to my mind, is that the

Mr. *Webster*—continued.

the ton is in practice; everybody knows it, whereas the metre is practically unknown.

1841. But we still might retain the pound as the unit, might we not?—Yes.

1842. You object to it, you say, to some extent, because you think it would be too sweeping; could it not be carried out very easily if for some years it was made permissive, and the two systems ran concurrently one with the other?—I am afraid it would not make way.

1843. It might not in the agricultural districts, but in towns do you not think it would?—In towns it would, very likely.

1844. Have you any knowledge of trading in towns?—Not very much; only by buying in towns.

1845. What is the measure you refer to of 240 lbs.?—That is one of the many local weights.

1846. What is it called?—It is one of the Liverpool weights; Liverpool has seven, or eight, or nine different weights, and that is one of them.

*Chairman.*

1847. What is the name for it?—Per 240 lbs.

1848. Is there any other name?—No.

Mr. *James Stevenson.*

1849. For what kind of grain is it used?—Indian meal is sold in Liverpool per 240 lbs.

1850. But the farmer has to learn that weight, has he not?—Yes.

Mr. *James Stevenson*—continued.

1851. And you say, in the case of the Liverpool trade, he would have to learn seven or eight different weights, do you?—A trader would; farmers do not buy direct from Liverpool.

1852. But a farmer has to go to school like anybody else; are you aware that it is estimated by some gentleman who understands scholastic affairs that this metrical system would save a year, or two years', work in the school in learning weights and measures; would not that be of advantage to the son of a farmer?—Yes, I believe it is more simple.

1853. If it is more simple for a boy, would it not be more simple for a farmer?—When it comes into practice, it would.

Sir *Edward Hill.*

1854. Do you think every farmer knows how many pounds there are in a ton?—Perhaps not every one, but they know how to weigh an hundredweight.

Mr. *James Stevenson.*

1855. You spoke of the advantage of a decimal system of calculation; do you realise that if the cental was universally adopted, and all grain was sold by the 100 lbs., it would give the advantage which you desire?—Of course, if it was universally adopted by railway companies and by everybody else, I should welcome a uniform weight, be what it may, better than the present system; but I should certainly prefer for the present a weight that is well known and recognised all over the country in preference to a new one.

Mr. HARVEY CECIL WOODWARD, called in; and Examined.

*Chairman.*

1856. YOU are a Corn Broker and Commission Agent, of the firm of H. C. Woodward & Company, of Liverpool, are you not?—Yes.

1857. I believe you have had considerable experience as to the question of weights and measures in the sale of grain and corn?—I have.

1858. Will you give the Committee a short account of the method adopted in Liverpool for the sale of grain as against the system which we have heard of from Mr. Lenders as being adopted in Mark Lane?—Our principal unit of sale in Liverpool is the cental, the 100 lbs.

1859. When did you adopt that system?—First of all, about 35 years ago.

1860. Has it been successfully adopted in Liverpool?—Yes, to a great extent; it is not invariably applied to every article. It has been attempted to be enforced or used for every article; but one or two articles, from matters of convenience, have slipped back to the old denomination, such as flour.

1861. That is the 112 lbs., is it?—No; we do not sell by the 112 lbs. Flour was attempted to be quoted and sold by the cental; but people had been always accustomed to buying and selling flour by the sack, and they found that it involved rather more reckoning than they liked, so it slipped back to being quoted by the sack.

*Chairman*—continued.

1862. Why did the Liverpool market adopt the cental?—It is a long story; it was agitated as far back as 1858, in consequence of the Bill being brought into Parliament by Messrs. Adderley Child and Bass to promote uniformity of weight in the sale of grain. Liverpool rather welcomed that change at the time, and there were meetings held in conformity therewith and to promote the sale in that manner. Our trade is conducted, and it has rules laid down, by an Association in our trade. A president is elected, and a committee is elected by the members, and they framed rules that the sales on the market should be by the cental; therefore it was adopted. Then, 20 years later, there was a fresh attempt to introduce it, headed by the Association of British and Irish Millers in 1878, and more meetings were held. It took a further stride to some extent, and became rather more used than before. It was adapted to Indian corn, and also to peas.

1863. It was in fact, was it, an endeavour to obtain some system out of the chaos which existed?—It was.

1864. And, as far as Liverpool is concerned, it has been successful?—It has been successful. Then, of course, the influence of Liverpool radiates very much beyond the town itself; to the whole of the north of England, in fact, and

*Chairman*—continued.

you may even say part of the Midlands and the West of England, because Liverpool trades with Wales down to Cardiff.

1865. If you found the adoption of a simple unit so successful and valuable in your trade in Liverpool, which, as you say, extends over a great part of the kingdom, how is it that other people have not taken it up, the Mark Lane people, for example?—Of course, here and there an interested motive prevents it being taken up. There is no doubt, as Mr. Lenders told you, as far as he is concerned it is a little more profitable to keep the thing as it is, simply because expert knowledge leads to profit; the more confusion there is in weights and measures the more opportunity there is for a man who knows more about them to make a little money out of them.

1866. You agree then, do you, that so far as the public is concerned, the adoption of a simple unit would be of great advantage?—I agree. I could illustrate it in several ways. Take a farmer, for instance, who wants to buy food for his stock. He may buy either beans, peas, oats, or Indian corn, all four of which we may call feeding stuffs as apart from wheat food. If he sees those all quoted in the same circular per one weight, say, per 100 lbs., although peas may be quoted at 5*s.*, Indian corn at 4*s.* 6*d.*, oats at 4*s.*, and so on, he can see immediately at a glance which, weight for weight, is the cheapest article to use; whereas at present, if he looks at one circular, he will see Indian corn quoted per 480 lbs.; he will see peas quoted per 504 lbs. perhaps; beans quoted per 480 lbs., and he will see half-a-dozen different weights; therefore, he has to make an elaborate calculation and reduce them to one common denominator, and either buy by the quarter of 480 lbs., or the cental of 100 lbs., and then see which costs him most money. It is much simpler if he can look at the list and say, "Beans are cheaper than peas; oats are much cheaper than Indian corn, and I will buy oats."

1867. Assuming that simplification in regard to these matters is advisable, what do you say to the adoption of the metrical system, which is the system now adopted throughout the civilised world, as against the adoption of an English decimal system?—I think that the adoption of an English decimal system would be somewhat simpler here. I think if you took the English lb. and decimalised it; if you made a stone of 10 lbs., we will say, and a cwt. of 100 lbs., a half a cwt. of 50 lbs., and a ton of 2,000 lbs., it would be much better understood than such weights as kilogrammes; it would be simpler. I may say that in America the ton of 2,000 lbs. is already in use. In California, for chartering ships, it is really 20 centals, and they make four of their quarters to the ton.

1868. Supposing you were told that all civilised countries, with the exception of England, Russia, and America, have already adopted the metrical system; and supposing you were told also that if England were to adopt the system, Russia and the United States would certainly follow, do you think that is any incentive to us to recommend, if we are to change, a system which is uniform throughout the whole world?—

*Chairman*—continued.

If you ask me, I think our weights decimalised would be easiest. I do not say necessarily it would be the best. If you can get a weight which the whole world would accept, I think so much the better; but I think you will find with our insular country, and a good deal of strong prejudice on the subject, that perhaps the simplest decimalising you can do the better, that is all.

1869. Would you like to see the English system decimalised as a step towards the adoption of the metric system; or do you think, as has been suggested, we might have the metric system made permissive or legal, to run coincidently with the present Imperial system, and after a certain length of time make it legal or compulsory?—I am not a believer in permissive legislation as regards weights. I think you would only add to the confusion at present existing, and only introduce other weights permissively. You would simply be putting another score of weights on top of the hundreds you have already. My feeling is, if you do anything, make it compulsory. The people will grumble at first, but they will see the advantage of it in time. I was told by a German that the Germans very much objected to the change at first, but in 12 months they were all very thankful for it.

1870. With regard to the use of the words "kilogramme," "metre," and "centimetre," are those words more difficult to use than "barometer" or "thermometer"?—I do not think they are; they are only a little stranger.

1871. There is not much in it, is there?—I do not think there is; but having got as far as the cental, one is rather in favour of taking our own weight and decimalising that, because a large quantity of our transactions are with America, which practically uses English weights, and Australia, which uses the English weights. You see the English-speaking part of the world is so enormous now that, after all, it is a question whether we might not as well set a lead as follow one.

1872. Do you think there is any possibility, even though we may be the preponderating nation, of any other nation which has adopted the metrical system adopting ours?—I do not know; I do not think they would; but, still, if you had two systems, you could rub along very well, I think. I do not much care if you take America, Australia, and New Zealand, if they adopt the same system, based on the English lb., and the other nations going on with their kilogrammes, it would be found workable, and it would be an enormous advance on the present state of affairs as regards this country.

1873. Do you deal with countries in which the metrical system has been adopted?—Not to the extent Mr. Lenders does; mine is more a home trade. I should buy from Mr. Lenders, but not from other countries direct.

1874. You have heard what Mr. Lenders said, have you not?—Yes.

1875. Do you agree with him?—Entirely.

1876. You gave evidence, I believe, before the Select Committee on the Corn Sales in 1893?—Yes, I did.

1877. This Committee have had that evidence before

*Chairman*—continued.

before them. Is there anything in that evidence which you think bears upon this particular point more than you have already given us?—No. I think my evidence all tends rather in the direction of a decimal system; it was rather intended to emphasise that, and also as to uniformity of weight.

1878. You think some uniform kind of weights ought to be adopted, do you?—Yes; we were sorry to see the hundredweight fixed on by that Committee; we thought it a retrograde step, and that it would cause trouble.

1879. Do you think your trade is specially open to the suggestion that you employ a vast number of different weights more than is the case in any other?—More so than in any other, because there are no two counties hardly you may say, and indeed two parts of the same county, where the same weight holds good.

1880. Therefore, it is of very great consequence, is it not, not only with regard to our relations with foreign countries, but for our own trade, that some unit should be employed?—I think so; of course there are a great many people in those trades who understand them, who say it does not matter and they can get along as they are, but it seems to me a most antiquated system and that we are entirely behind the age.

1881. From your general knowledge of other trades, such as engineering and so forth, do you think it would be of advantage in those matters to introduce the decimal system?—I think it would; I think when once we really adopted a decimal system taking an English system, or the kilogramme system, that in a year or two we should all be delighted with it, and find that it simplified our calculations.

1882. And educationally, too?—Yes, very much.

Mr. *Gibbs.*

1883. You said you think that compulsion would be necessary. I suppose you would have a certain permissive time, would you not; you would not pass an Act at once saying that everyone should use the metrical or decimal system, would you?—It is difficult to make a recommendation in these matters. I am inclined to say that, on and after a certain date, it should be made compulsory.

1884. You would give some long date, would you not?—I would give 12 months.

1885. That would amount to making it permissive for 12 months, would it not?—Yes, but unless you make it compulsory, you will never get it used at all; that is my opinion.

Mr. *Stevenson.*

1886. Would you make the cental compulsory now if Parliament saw fit to do so?—I think, if Parliament chose to do so, we should. Parliament has made that permissive, and that is just why we say it does not spread. They legalised the cental and allowed us to have such a weight in use; formerly we could not use such a weight, but we can use the cental now. We applied for the half cental, but I am afraid they thought it was too near the half hundred weight and would not grant it us because there might be more opportunity of swindling with such a weight.

Mr. *Stevenson*—continued.

1887. Is it the case that with regard to American weighing machines you do not hear of stones, and so on, but simply pounds?—I do not think so. You see there are new weighing machines coming out that weigh in pounds. I do not think they use the word "stone;" at any rate they generally buy and sell there by the bushel of 56 and 60 pounds, except in California. There is an idea that the cental is in use in America, but it is not except in the State of California, and it is used there as we use it in Liverpool.

1888. You said just now that in different markets in the same county they use different weights?—Yes, they do.

1889. Surely county by county some uniformity might be got by enforcing the existing law?—No, there is no existing law; there is a delusion as to that; there is nothing to prevent a man selling by any multiple if he likes; there is nothing to prevent my selling by any weight I choose to sell, such as per 480 and 500 pounds. For instance, take Worcestershire; they sell there by the bag; you cannot have a vaguer thing in the world than a bag. It may mean anything, but it really means three bushels of 62 pounds. A farmer there quotes his wheat by the bag. If you see a price of 12*s.* a bag, you have to find out what that means per quarter, or per cental, and it is quite an elaborate calculation.

1890. What is the remedy for that state of affairs?—To make one weight compulsory; we suggest the cental. We say they could quote the wheat and sell it by the cental.

1891. Then it is not legal now, is it?—Yes, it is legal; but it is only permissive.

Sir *Edward Hill.*

1892. Do you wish us to understand that you are thoroughly satisfied with the present mode of selling wheat?—Yes, it does not affect me personally, you will understand; only as an Englishman I am rather ashamed of the present system.

1893. And you think any change should be made compulsory, do you?—Yes.

1894. Then I understood you to say that you preferred the metric system, but that you thought there might be less difficulty in decimalising our pound than by adopting it?—No, I do not say that I prefer the metric system; I would individually as a simpler plan, I think, prefer a decimal system of the English weight, but what I say is if you cannot get that, it might be possible that the metric system would be of wider sweep, and would put us exactly on the same basis as France and Germany; therefore it might have some advantage over starting a system of our own, so to speak.

1895. Do you not attach considerable importance to the assimilation of the weights of this country to those of foreign countries?—I think it perhaps would be as well, but I am more interested in getting something like uniformity at home.

1896. But uniformity would he equally well obtained

Sir *Edward Hill*—continued.

obtained if you had the metric system, would it not?—Yes, it would.

1897. Then do you not think that given the intention to make a change, it would be better for the trade of the country generally to adopt the metric system rather than to set up a standard of its own?—It might; I think perhaps it might; but the only objection is, as I say, I think that perhaps at first it would be rather unintelligible to the bulk of the people.

1898. But you do not see any special difficulty in the metric system, do you, as compared with the other system?—The only difficulty is that you start from a different unit. The sale of very nearly all kinds of produce is pretty well grounded into the English mind by the avoirdupois pound, and people would think it would be like altering a sovereign if you struck at the original unit in their minds. It would be rather more difficult, I fancy, to convert the people, and they would object to it still more as being a foreign weight.

1899. At the same time I think you expressed the opinion, did you not, that if 12 months was found sufficient for the change by the Germans, it would suffice for the English?—I think so; especially if taught in the schools.

1900. You appreciate the simplicity of the system, do you not?—Yes.

1901. And I daresay you think it is a waste of time to go on teaching the present system?—Yes, I think so.

Sir *Samuel Montagu.*

1902. If the United States of America were to adopt the metrical system, would it not be greatly to this country's advantage to follow them at once?—I think so.

1903. They have in Brazil the metric system; how do they invoice their coffee, and such like, which arrives in Liverpool?—I am not in the coffee or in the Brazil trade; I know they have the metrical system, and I am told it was established there by a stroke of the pen; that they decreed it should be, and it came into force pretty straight.

Sir *Samuel Montagu*—continued.

1904. How is wheat coming from Chili invoiced?—Wheat and those things are nearly all converted, as Mr. Lenders says, according to a system of tables. I think Chili wheat is sold by the fanega; they convert these fanegas into English pounds or quarters as the case may be, and there is a recognised proportion in all our calculations between buyer and seller.

1905. You appear to have a predilection for the English pound; which pound would you choose, the avoirdupois, or the troy pound?—The avoirdupois pound is the one familiar to me.

1906. Would not you then have all the jewellers and druggists in arms against you asking why you would abolish their pound?—Perhaps so, but you would have all the others against you if you abolished the avoirdupois pound.

1907. Therefore as you would have a considerable division of opinion in this country as to which pound to adopt, do you not think it would be better to have the half-kilogramme, which is a little heavier than our pound, and make a clean sweep of it?—Does the half-kilogramme more nearly resemble the pound troy, or the pound avoirdupois?

1908. It is a little above the pound avoirdupois, and considerably more than the pound troy, but what I want to put to you is this: that, seeing the difficulties that would arise as to divisions of opinion in the commercial classes as to which pound should be chosen, would it not be better to have the pound which is nearly universal?—Yes, I think there is some force in that argument. If you have to make a change, you will have difficulties about it, and you had perhaps better swallow the whole thing.

1909. I suppose it is your experience of the rising generation in Lancashire that they would not be less intelligent than the Germans in learning?—I think the Lancashire working man is much more intelligent, as a rule, than the average peasant in the Midlands and the south. I think they are naturally rather sharper people.

1910. Then, as far as Lancashire is concerned, do you think the people there would adopt the metrical system as rapidly as the Germans did?—I do not see why they should not at all.

*Tuesday*, 14*th May* 1895.

MEMBERS PRESENT:

Sir John Barran.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Mr. Jasper More.
Mr. James Stevenson.
Mr. Stewart Wallace.
Mr. Webster.
Mr. Wrightson.

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. W. T. ROWLETT, called in; and Examined.

*Chairman.*

1911. YOU, I believe, are engaged in the textile trades in Leicester?—I am engaged in the yarn trade.

1912. And you have had considerable experience in the question we are considering, that of the advantages and disadvantages of the present system as compared with the system adopted elsewhere?—I have.

1913. What have you to say as to the effects which you observe in your trade with regard to the present system of weights and measures?—The present system of weights and measures is exceedingly complicated, and it is one which I find in my business is very awkward for foreign trade. I do very largely in foreign yarns, and I find that the competition which we have to undergo from nations which have already adopted a different system, is very difficult to surmount.

1914. How do you surmount it?—We have to go through complicated calculations. For instance, if I buy yarns in France or Germany, I buy them in kilos, and I have to transform them into pounds avoirdupois before I can begin to put my price upon them. Suppose I buy French yarn at so many francs and centimes per kilo, I have to transform that into so many francs and centimes per pound avoirdupois, and, after that, transform the result into sterling. Whereas, if a German is selling yarns to France, he, dealing with the same weights and measures, has simply to transform his marks and pfennige into francs and centimes, thus saving a very long calculation.

1915. Is that calculation an expense you have to submit to in the way of clerks and otherwise, that you would not need if we adopted the same system?—Certainly.

1916. Are you expressing, not only your own opinion, but the opinion of other traders in the same line as your own?—Certainly. It also applies in the opposite direction. We export yarns to France and Germany, and when we do so we have to transform them in the reverse direction. First of all, we have to begin with the price per lb. avoirdupois, then we have

*Chairman*—continued.

to transform the price per lb. avoirdupois into the price per kilo in English money, and after that, transform the price in English money into the price in French or German money, as the case may be. And that applies exactly in the same way, as I have indicated, in the purchasing.

1917. And those who are dealing on the same system avoid much of that calculation?—That is so.

1918. And do you think that a change which might be recommended or which might be made legal would be accepted and valued in the trade?—I have no doubt about it; because, you see, when a man has all his thoughts in that particular direction he is more ready to adapt himself to the change. Having to make one simple calculation, he is always ready for it; he does not have to make a special calculation.

1919. Is not there some difficulty with regard to the English system, which we understand is adopted almost generally in the counts in the yarn trade?—The English system is not adopted anything like generally. When you speak of the English system you speak of a multifarious system.

Mr. *Stevenson.*

1920. You mentioned yarns; does that apply to cotton yarns?—Cotton, worsted, and woollen yarns; yarns of all descriptions.

*Chairman.*

1921. We understood from a previous witness that the system of the counts of yarns, that is to say, the numbers expressive of the weights or lengths of yarns, was the system generally adopted, and that there might be some difficulty felt, not only in England but in other countries, if we were to adopt a metrical system. What is your opinion upon that point?—I presume that that was evidence from a cotton spinner.

1922. That was so?—That is the only count, that I am aware of, that is anything like acknowledged all round, and even that count is not

*Chairman*—continued.

acknowledged in France. The French cotton number is 1,000 metres per half kilo.

1923. That we were informed?—Now, the numbers that we have to deal with in English are excessively multifarious. We have in my own town four or five different numbers, several of which are not used in any other town. They have in the worsted trade in Yorkshire a hank of 560 yards. The number of those hanks of 560 yards per lb. is the size of the yarn. A single number is one which is used to indicate the size of the yarn, no matter how many folds there are; that is to say, a thread off three-fold 20 yarn would be three threads of 20 single doubled together, and it would come really to $6\frac{2}{3}$ in a single. Now, in cotton yarn their hank is 840 yards, and it is doubled on the same principle. The hank of spun silk is the same as the hank of cotton in a single; but when it is doubled, then they still count the number of hanks, no matter how many folds there are. For instance, if we take a hank of 20 single-spun silk, or I would rather instance 60 single-spun silk, it would be 60 hanks of 840 yards to the pound in a single. If we make 60 two-fold, we must double two threads of 120 single together, in order to have 60 hanks to the pound. If we have 60 three-fold, we must double three threads of 180 together.

1924. How would this be simplified by the adoption of the metrical system?—In France and Germany in worsted and woollen yarns the metric system is largely used. There are also other counts, but everybody understands the metrical numbers. They have the thousand metres per kilo as the basis. They have it for worsted, they have it for woollen yarns, and they have it for spun silks, and that is the number of the yarn, no matter how many times that is doubled together. I will give you an instance of the way that acts very prejudicially to the yarn trade in England. We import spun silks. The number 100-spun silk is equivalent roughly to the number 60 English. The 100 two-fold is equivalent to 30 two-fold English. You see, therefore, that what is called 100 single in the metrical number in spun silk is 60 single in the English is again doubled; but, instead of being called 60 two-fold, it is called 30 two-fold. I was once called to the assistance of one of our local solicitors as to a dispute about a yarn agent selling these foreign silks. He sold to his customers some 30 two-fold, and he was not a man at all technical in his work, and he was told by his correspondent abroad to write for 30's 100 two-fold, 30 being the English and 100 the French number. His customer said to him, "Can you give us 30 two-fold instead of three-fold." He writes to his spinner for 100's, 30's three-fold. He ought to have written for 30's, 150 three-fold. So his customer got his yarn one-half heavier than he expected, and he brought a law suit. That is a glaring instance of the way in which this has worked.

1925. A misunderstanding between the buyer and seller in consequence of the variations in the units of measure and length?—Yes. The French people have various other numbers, but having this metrical system, if I were to go to a French spinner and quote to him any one of our English numbers and say, "I want such a number," he would say "I do not understand your number; can you give me the metrical number." If I could give him the metrical number we should agree at once. That is a thing which I have tried to bring forward to our associated Chamber of Commerce and I have failed in my object because we have not got the metrical system here.

1926. Explain what you mean when you say you have failed in your object?—I have failed in getting anything like unanimity amongst the spinners and merchants because they say "It is no use your introducing a metrical number of yarn till we understand what the metrical system is generally in England."

1927. Do you think that there would be a great objection felt upon the part of the dealers to the permissive adoption and after a while the compulsory adoption of the metric system in England?—I do not think there would be at all. I believe that everybody who does any foreign trade would be anxious for it.

1928. And do you speak in that respect, not merely of your own textile trade, but can you say that for the other trades of the country?—I believe everybody who does an export trade, whether he does it by weight or by measure, would be glad to see the metric system introduced for the sake of uniformity and for the sake of facilitating his business abroad.

1929. And you think that you are handicapped in that respect as regards other dealers who deal under the metric system?—Undoubtedly.

1930. We have had a great deal of evidence as to the simplicity of the metric system as against that which we have adopted, and I do not think I need trouble you to tell the Committee about that?—It is quite unnecessary I am sure.

1931. Also, upon the subject of the time that would be saved in schooling we have had evidence; have you anything fresh you can give us on that point?—I had the advantage of a hearing from our local Trade Council. That was one of my arguments, I addressed the body of working men for 20 minutes, and at the end of that 20 minutes they gave me a unanimous vote in favour of it; and the working men of Leicester are amongst the strongest supporters of the change. They very largely go in for it on account of the saving of time in education.

1932. The matter has been brought before them by you?—The matter has been brought before them by me at the Trade Council, which is a Union of Trade Unions.

1933. Have they passed any resolution?—They passed a resolution to that effect.

1934. Have you heard of any objection on the part of English spinners to the metrical numbering of yarn?—I have on the part of the cotton spinners. That is what I alluded to previously. The cotton numbering has been very largely adopted abroad, and some of them have objected to a change on that account; but I am convinced from what I have seen and heard abroad. I am frequently among the spinners both of France and Germany, and I have been in

*Chairman*—continued.

in Belgium also. I am convinced they would be very glad to adopt the metrical numbering of yarns if we had a consensus of English opinion also.

1935. Do you in your trade use the actual kilogrammes as measures?—I use the kilogramme in this way: that I buy raw material in France and have it spun. Therefore I make all my calculations in kilogrammes, and francs, and centimes, even to my selling price in England, before I transform it.

1936. I was not speaking of calculations; I wanted to know whether, in your house of business, you have got a kilogramme weight?—No, we have not. We buy the things in kilogrammes, but we transfer them into pounds avoirdupois, because we have to sell them in that form.

1937. Do you know whether the use of a kilogramme weight in your trade is legal or illegal?—I always understood that it had been legalised years ago. But it never has been used. We have understood at our Chamber of Commerce that it was made legal some years ago.

1938. Do you know anybody that ever used it?—I do not, except chemists who use it for making up prescriptions which are brought from abroad. My clerks all understand it, and find it very simple.

1939. Have you had any other bodies in Leicester who have memorialised or have passed resolutions in favour of the metrical system being adopted?—We began with the Chamber of Commerce. After that the School Board gave me a hearing and passed a unanimous resolution. Then the Trades Council. After that the Chamber of Agriculture did the same thing. At the beginning of this year our Town Council did so; and latterly, this last week, I have received from our local Trade Protection Society this resolution: "That the committee of the Leicestershire Trade Protection Society, representing 1,800 members, who are bankers, merchants, manufacturers, and traders in Leicester and the district, are pleased to find that a Select Committee of the House of Commons has been appointed to inquire whether any, and what, changes in our weights and measures should be adopted. The present inequalities and varieties of weights and measures in different localities cause much inconvenience which the committee are of opinion would be obviated by the introduction of the metric system."

1940. Do you think that there would be much difficulty in introducing compulsorily the metric system in England?—I think not, if it were made compulsory in Board Schools for a few years first. I have always advocated that the first step should be to make it compulsory in Board Schools.

1941. To make the teaching of it compulsory?—To make the teaching of it compulsory.

1942. And after that you think it might be made compulsory for trade purposes?—I think so. In giving these addresses I have adopted this plan: With the Trade Council, illustrations on my ten fingers and ten toes brought them to understand what I wanted. With the same object I have used this little compilation: You



*Chairman*—continued.

will see in the centre there is a copy of the metrical weights and measures put in a condensed tabulated form. I have a large cartoon of that, which has been quite sufficient to very strongly impress people. I call that the metric table-book. It contains all that is absolutely necessary for anyone to know, and it is so simple that it can be understood in two or three minutes.

1943. Do you think that these local lectures are of value in giving the people an idea of the simplicity of the subject?—I think so. I may say that on our Town Council there were two professional men, one a solicitor and another an architect, who had never studied this question at all. They both of them said to me afterwards that they were very much surprised at the simplicity and importance of the system. One of them said he had not the remotest conception of what it was before, and I only gave a quarter of an hour's address.

1944. Have you anything to say with regard to local differences in weights and measures; we have had a good deal of evidence upon that subject before us?—We have in Leicester a number of different weights and measures. In wool, we have a stone of 14 pounds and a tod of 28 pounds. Meat is sold by the stone of seven pounds. In our market all fruit, except plums, is sold by the gallon of eight pounds and the strike, or eight gallons or 64 pounds. Plums are sold by the gallon of nine pounds and strike of eight gallons, or 72 pounds, and all kinds of fruit are also sold by the hundredweight of 112 pounds. Potatoes are sold by the gallon of eight pounds, and the strike is 10 gallons or 80 pounds.

1945. Have you ever tried to explain the matter to small tradesmen, market people, and persons of that class?—I have not gone among the market people at all.

1946. Do you think there would be some resistance on the part of people of that kind who are constantly using pounds and ounces, and have no knowledge of anything else; do you think there would be some resistance or difficulty felt?—There might be possibly a little difficulty at first, but I do not think it is a difficulty that would be very hard to surmount. When I recollect what I have known in Germany, and remember the various weights used before the introduction of the metrical system, and the way in which everybody has adopted it without friction, I do not think that my own countrymen are more stupid than they are. I remember, in Berlin, going into a yarn merchant's warehouse and being offered almost identical yarns by the handelspfund and zollpfund, and where such inequalities as that existed. I do not think we ought to fear for our own countrymen.

Sir *Samuel Montagu.*

1947. Have you any knowledge of this table, which is called the cotton manufacturer's table, for buying and selling cotton yarns in Manchester; it says that the ounces are avoirdupois, and the pennyweights and grains are troy?—Yes.

1948. Is that used in Leicester at all?—Yes, it is used, but it has been obviated by a balance which shows the number of the yarns. You put in a certain number of leas of 120 yards each, the

Sir *Samuel Montagu*—continued.

hank is 840 yards, divided into seven leas of 120 yards each, and the scale indicates the number, so that it does away with that calculation. I used to use it myself before that.

1949. Are you aware that contracts are legal under the metrical system in this country, but not actual weights and measures?—I am aware that contracts are legal, and I thought the weights and measures were.

1950. You may contract to sell any number of kilogrammes, but you must not have a kilogramme weight in your warehouse and use it?—That I was not aware of; my impression was the contrary.

1951. Supposing that the recommendation should be in favour of the metrical system, how long do you think it would take for the people to become accustomed to the metrical system in this way?—I should give them three years.

1952. And then make it compulsory?—Then make it compulsory.

1953. Do you think, during the permissive period, that your trade would take it up?—Considering the large quantity of foreign yarns which come into our town, I think it would.

1954. You think that certain trades, knowing it would be compulsory at a fixed date, would, prior to that date, endeavour to accustom their trade to it and bring it into vogue?—I do not think there is any doubt about it.

1955. So as to be prepared even in advance of the three years?—So as to be prepared. As men of business, they would be bound to do so, otherwise they would find themselves in a difficulty when the change came.

Sir *Edward Hill.*

1956. As far as I understand, you are thoroughly dissatisfied with the present system of weights and measures as being cumbrous and complicated?—Certainly; I am thoroughly dissatisfied with it. It is exceedingly complicated.

1957. You wish to see a change to a more simple system?—Exactly.

1958. And you would probably prefer that that system should be in accord with systems that obtain nearly all over the Continent, if not quite?—I should think it would be the height of folly to have any other system.

1959. And you are satisfied that the present system is injurious to British trade interests?—Most certainly; not only in my own trade, but I hear engineers speak about it very much. They say it is impossible to make the fractions of an inch tally exactly with the metrical fractions (the decimal diminutives of the metre), and, therefore, when they come to the pitches of screws and things of that kind, it is almost impossible for them to agree.

1960. Has it come to your knowledge that the fact of England not having a metrical system does tell against her in the commercial world?—Certainly it does.

1961. And you do not anticipate that there would be any greater difficulty here in England in introducing this system than has been found in other countries?—I do not think so. To anticipate that there would be greater difficulty would be to consider that our own country people are more stupid than foreigners, and I do not think they are.

Sir *Edward Hill*—continued.

1962. Then I take it that you would wish to see two things done at once; one would be to make the use of the metrical system optional and legal, the other would be to make the teaching of it compulsory in all our elementary schools?—Not only compulsory, but that it should receive the grant for teaching the same as other subjects do. We had it made permissive some time ago, as you are aware; but it has been abandoned in some parts of the country because the work of the teachers is not recognised by the Committee of Council on Education.

1963. And you would rather take out the present system of arithmetic, and give the grant for the decimal system?—Certainly. There is another point about the teaching of decimals. As long as a student is in simple arithmetic, he is in decimals; but the moment he begins to get into compound arithmetic, he is taken out of decimals into duodecimals with our pounds, and shillings, and other systems for weights and measures, and the decimals are introduced at a later date after he has got through vulgar fractions, so as to give him the idea that he is going to learn something difficult; and if you give a student the idea that he is going to learn something difficult, he always finds it is more difficult to understand. Therefore I should like to see decimals taught as a continuation of simple arithmetic instead of later on.

1964. You would rather decimal fractions came before vulgar fractions?—Yes.

1965. From an educational point of view, you consider the time given up to the teaching of fractions and duodecimals so much waste?—Yes.

1966. It would be much better employed in teaching them something useful?—Much better employed in allowing the children to leave school or in getting them to study something they are not going to throw away afterwards. Three-fourths of what I learnt in the shape of arithmetical tables when I was a boy has completely passed from my memory, and I find it the same with everybody else.

Mr. *Stewart Wallace.*

1967. Apart altogether from making it obligatory in Board Schools, you think three years would be sufficiently long for the transitional period?—I think so if the agitation were at once begun.

1968. Have the cotton spinners any other reasons for objecting than the mere trouble of learning the details?—The real reason, I think, that the cotton spinners object is this: that all the world understand the Manchester count, and that they would have to work with all the world to transform it into the metrical count.

1969. But they have no other objection?—They have no other objection that I know of.

1970. Have the Leicester workmen had any special opportunity of being well versed in the metrical system?—No, not more so than others.

1971. How do you account, then, for their being so warmly and unanimously in favour of it?—I believe one of the greatest points was the saving of time in education or the setting them free for other studies.

1972. Are

Mr. *Stewart Wallace*—continued.

1972. Are they simply in favour of it from having had their attention drawn to the comparative advantages and disadvantages?—Yes.

1973. Not from practical application?—Not from practical application.

1974. Do the same objections apply to the change in the case of linen yarns that you have referred to in other yarns?—I think it is only of the cotton yarn as far as my experience goes. I have nothing to do with linen yarns, but I know they have several different modes of counting linen yarns in Scotland.

1975. You do not know the linen yarn trade?—No, I do not.

Mr. *Wrightson.*

1976. You gave us some illustrations of comparative arithmetic; can you give us any information with regard to the mental operation; do you consider it would be a great advantage in mental arithmetic to adopt a metric system?—I consider that in mental arithmetic the difference between the metrical system and our own is the difference between simple arithmetic and compound arithmetic. There is no after reduction of the terms. It is simply a question of where the decimal point goes.

1977. So that you think mental operations would be very much more easy, and would be more rapid?—Yes.

Mr. *Jasper More.*

1978. How do you propose to make it compulsory at the end of three years?—It is proposed to make any transactions that were gone into on the old system unenforcible; that is to say, a contract made under the old system should be one that would not be enforcible by law.

1979. You think that would put an end to the difficulty?—I think it would. Supposing a man made a contract for a large quantity of material which went up in price and expected delivery of it, the seller might say, "Oh! this is not a legal contract, and therefore I do not hold myself bound."

1980. That would hold good in large transactions; do you think it would equally in small?—In small transactions you would not have the same power. I know that in countries where the metric system is in use that they sell by other old-fashioned weights and measures occasionally.

1981. You would not care much if they did the same in this country?—That is not where the greatest difficulty comes in. It is pretty certain that with our present system of education, as the children come out from the Board School accustomed to the metric system, that the old Imperial systems would naturally die out, because the rising generation, being accustomed to make all their calculations in the metric system, would leave the other gradually.

1982. But your idea is to terminate the present system in three years, and I only want to know how you propose to terminate it in three years?—It is proposed that the verification of weights and measures should only be on the metric system.

Mr. *Webster.*

1983. I think you said you were connected with the woollen industry of Leicester?—Yes. I am merchant and yarn agent.

1984. Do you think the metric system would benefit the yarn industry of Leicester in any way?—It would certainly do away with the very large complications we have.

1985. Where is your principal trade to?—I sell in the neighbourhood of Leicester and Nottingham. I import from France and Germany.

1986. Then you said, I think, that the metric system has been adopted in Germany; were you in Germany at the time of its adoption?—I was there frequently before its adoption, and I have been there frequently since.

1987. You had dealings with Germany about the time of its adoption?—I had.

1988. And, as far as you can understand, its adoption was accomplished with, comparatively speaking, ease?—Certainly. I have always understood them as speaking of it as having gone through with scarcely any friction.

Mr. *James Stevenson.*

1989. You have proposed after a limited number of years that selling by the old units of the Imperial system should be illegal?—Yes.

1990. That the contracts should not be valid?—Should not be valid.

1991. Then it would be invalid to make a contract to buy so many pounds of tea at so much a pound?—You might adopt the French pound, but I should make it invalid to sell it by the pound avoirdupois. The French pound is simply the half kilo.

1992. Would it be illegal to sell cloth at so much a yard, and the width of the cloth to be so many inches?—I should not make that to be illegal, but I should make the dealing with large quantities in that way illegal. I think it would be very difficult to make all the small quantities illegal. In fact, I know it is the case in many parts of both France and Germany that small quantities are even now sold by the old weights and measures.

1993. Then you would contemplate the wholesale trade being carried on under the metric dimensions, and the retail trade being carried on under the Imperial dimensions?—You would find no retail trade of any importance carried on in that kind of way. The old system would simply be temporarily employed in the same kind of way as you find people going for a quarter of an ounce of tea. I do not think any large quantity would be sold under the old system.

1994. Then, after the metric system was introduced, what would a person say when he went to a shopkeeper wanting a quarter of an ounce of tea?—If he were uneducated and had not heard of the new system he would ask for a quarter of an ounce of tea.

1995. But the shopkeeper would not be allowed to keep quarter-of-ounce weights?—He would have to find how many grammes was the equivalent to a quarter of an ounce weight, and have a scale fixed up.

1996. And an ounce and a-half would be another

Mr. *James Stevenson*—continued.

another number of grammes with a long decimal?—Yes.

1997. Do you think that would tend to convenience in the retail trade?—I do not think that practically there would be much inconvenience in it. I do not believe it does obtain largely in any of the countries where the system has been adopted, but I know it does to some small extent.

1998. How would you deal with the gas-works, who have by Act of Parliament their price fixed at so much per 1,000 cubic feet?—I should figure it out by the cubic metre.

1999. Then you would have to alter the price in all the Acts of Parliament?—Any Act of Parliament which would make the use of the metric system compulsory would contain all the necessary stipulations for things of that kind.

2000. Would the gas companies have to alter all their gas meters?—That is a question which has never come before me, and which I have never thought of. It is very likely they would.

2001. Then gas supply pipes are all made by inches and fractions of an inch, half-an-inch, three-eighths, and so on; would this be illegal after the introduction of the metric system; would it be illegal to order so many feet of half-inch gas-pipes at so much a foot?—There is no doubt there would be some friction there; but as other countries have been able to overcome it, I do not see that we should not be able. Every country in Europe, with the exception of Turkey and Russia, has had to go through this experience, and has done it without much friction. We have all their experience to go upon. With respect to meters, I would say that at the commencement we might have a transformation table giving the number of cubic feet, marking the cubic metre until we should gradually have the meters replaced.

2002. I think you put the necessity of foreign trade as the most prominent argument for a change; why should the people whose business is all at home, for instance, gas companies, be obliged to change their language for the convenience of foreign firms with which they have nothing to do?—For the sake of simplicity of work. There would be some difficulty in the transformation at first, but the simplification of work would be immense.

2003. Going back to the gas works, how would the introduction of the metric system simplify the business of the gas companies?—It would simplify their calculations.

2004. In what way?—Take a cubic foot and divide it into cubic inches, and see what a difficulty it is.

2005. But gas companies do not talk of cubic inches?—The question of bookkeeping would be very much simplified if you have metric weights and measures.

2006. I do not see what difference it makes to the gas consumer if his bill is sent in in cubic metres instead of cubic feet?—I was not referring to the consumer. I was speaking of the gas company. I understood your question applied to the gas company.

2007. In their dealings with the consumer?—I think for the gas company it would be a considerable improvement; and, inasmuch as many of the gas companies now are also chemical manufacturers, and the chemical units are very much worked upon the metric system, there would be another very great simplification for them there.

2008. Is there a single kilogramme weight or a single metre measure inside any gas works in this country?—They use them in their chemical works.

2009. In the laboratory?—In the laboratory, where the calculations are made—the testings. For instance, in our own gas works I happen to be a member of the committee; we have a large laboratory where we test all the coals, for instance, that come in to see what their product is. Then we test all the by-products. All those things have to be done metrically.

2010–11. You select very small samples, and you analyse them, and you use the metric tables in the analysis; but I am speaking of the trade outside the laboratory, the manufacture of sulphate of ammonia in gasworks for instance; where does the metric system come in there?—The metric system will come in there the same as it does in any other trade. We have to sell our things by the hundredweight and ton, and, if we sell them by the 1,000 kilos and 100 kilos, we shall have the same simplification as in other trades.

2012. We now have the 1 lb. weight as the foundation of our weights, and the old English yard is the foundation of all our measures; what simplification can you get by substituting a weight which is two and one-tenth times the weight of a pound weight?—The simplification we shall get is in the decimal division instead of the Imperial division which we now have.

2013. Do you mean that 16 ozs. is an inconvenient division of a pound?—Certainly.

2014. Is it not found by experience that people like to halve and halve and halve in breaking up large quantities into small?—There is nothing to prevent you doing it by half and half in the metric system. You can divide 1,000 by 500, and again by 250 and again by 125.

2015. And then you stop?—And then you stop with absolute division, but even then you go to 62·5.

2016. Do you think there is no convenience in having a unit such as an inch for measurements and thicknesses which everybody clearly understands, and one of an ounce for small quantities of groceries?—The inconvenience I find is not in the particular unit, but in the relation it bears to everything else. The unit is divided into quarters and sixteenths, and thirty-seconds and sixty-fourths; but in the metric system each term bears an absolute relation to every other, and is much more easily calculated.

2017. Are you not aware that in actual measures the inch is divided into 100ths and 1,000ths?—Yes, you can do that.

2018. I read a specification last night of pipes for a water company; the thickness of the metal was given in three places of decimals of an inch according to the diameter of the pipe?—That is an

Mr. *James Stevenson*—continued.

an attempt to get away from our present system. If you take our tables you do not find that the inches are given in decimals at all, and what you say is an attempt to get away from a bad system. It is an attempt to solve the very thing that we are inquiring about now.

2019. My suggestion is that you can obtain decimals by applying it to our present units?—If we were a country absolutely isolated from every other, then I should be quite ready to agree with that; but as our very livelihood and our existence is dependent upon our communication with foreign countries, if we were to decimalise our own system without paying any attention to that which is adopted by the whole of the civilised world outside the Anglo-Saxon race, and one or two small exceptions, we should simply not get the full benefit which we should if we adopted the same that they have.

2020. Is there any reason why we should disturb the relations of all the other English-speaking populations of the world in order to conciliate those nations of Europe, or other parts of the world, who have adopted the metric system?—Yes. The reason is this: many of them and notably America, have expressed their intention of going in that direction, and if we adopt it there is not the slightest doubt they would follow suit. America has already begun do it, and one of the expedients that America is adopting at the present time, in order to try and take away our South American trade, is the introduction of the metric system in the goods they are exporting there.

2021. And cannot we pack our goods in such dimensions as would be understood by the metric people abroad?—If you do that you will have to make special goods for that particular part of the world; whereas if we adopt the metric system here, and we sell our goods metrically abroad, we should make all our lengths in metres, and in centimetres, or milimetres, and we should only have to make one uniform measure for ourselves and the foreigner, whereas if we have a different system to the foreigner we should be obliged to employ two systems of manufacture.

2022. Then the people who use the English language are to accommodate themselves in order to please the foreigner?—That is what the Germans are doing in taking our trade away.

2023. Is it not equally open to the English manufacturer to make his goods under the metric system, which the foreigners understand?—It is open to him to do that; but the Englishman being so accustomed to the present system is not ready to adapt himself to the metric system which is used elsewhere, and is consequently at an increasing disadvantage.

2024. Then your proposal goes so far as this: that we should no longer speak of inches, feet, yards, miles, and acres?—It would come to that.

2025. How long would it take before people ceased to talk about miles between two places?—In France and Germany, along the road everything is marked in kilos and metres, and when that is done here you will not find people talking about miles. When I first used to go to Ger-



Mr. *James Stevenson*—continued.

many, they would say it is three miles between such a place and such a place, but at the present time the people talk about its being something like eight or nine kilometres. I never hear anybody talking about a mile in Germany now.

2026. Then you would remove all our milestones and replace them with the kilometre posts?—Certainly, in course of time; those changes cannot all be made in a day, but they must soon come.

2027. Both Houses of Parliament were very busy for two Sessions on Railway Rates, and maximum rates were fixed of so much for so many tons per mile for different classes of goods. All that language would be quite unintelligible under the metric system?—It would. But the great difficulty we should have in transforming that has already been solved for us by Germany. The unit of Germany is a mark, which is in our own figure one shilling, and if we decimalised our weights and measures on the metric system we should simply have to take the German mark for our calculations.

2028. You said that you would begin to teach the metric system?—Yes.

2029. Do you think the Imperial system is adequately taught in the schools of the country? Is it taught in the schools of the country that a pound or unit of weight is the weight of one-tenth part of a gallon of water?—Do not you think it is a great deficiency that children are not being taught the basis of the present system of weights and measures?—It is only the basis of one particular kind of measure, but when you get to the metric system you have everything else starting from the same basis. You have a metre, and all the weights and measures come from the metre. A litre is a cubic decimetre of water.

2030. Would you not teach in schools here that a cubic foot of water is as nearly as possible 1,000 ounces?—That comes later on; when you get into compound arithmetic, such as the measurements of solids.

2031. Is that really taught?—It would be taught in the high classes of arithmetic. But when you have the metric system taught, the whole thing is so much in a nutshell that all these things that you are now alluding to would be taught in a very much shorter space of time than it takes them to learn the table-book.

2032. Do not you make allowance for the fact that we have been brought up to a language expressing our ideas of dimensions and distance and weight in what is called the Imperial system, and that we should have to forget that in order to realise what you think are the benefits of the metric system?—There is no doubt that you would have to forget a good many things. The working of the present day would be no use to our grandfathers, and our present ideas would be no use to our children. As the world progresses we must forget certain things and learn others.

2033. How would you do with the Ordnance Survey, which is upon a basis of so many inches to the mile?—Those are matters which would have to be dealt with. I admit there must be a great number of difficulties in transforming the system; but those are difficulties which, as I said

Mr. *James Stevenson*—continued.

before, have been gone through by all the nations who have adopted the system, and they have gone through them successfully.

2034. Would not the case be sufficiently met by our manufacturers being enterprising enough to adapt their goods to suit the wants of their foreign customers?—If our manufacturers did that it would meet the difficulty to a large extent; but, unfortunately, being so wedded to their present notions, they do not do it. As a matter of fact, the great foreign commerce of Bradford is very largely due to the German settlers, who were more enterprising than the English, and who will sell to any part of the world in the measurement and coinage of that part of the country.

2035. Is not an intelligent Englishman quite as well able to appreciate the advantages as the intelligent German who has come among them?—The Englishman has to prepare his things for the foreigner; he sends them abroad through other media. If the English manufacturer had to make all his calculations in the metric system, he would be all the more ready to make anything that was required for any other country who uses the metric system. At the present moment, everything being based on the pound avoirdupois, and the foot and yard, he is at an immense disadvantage; whereas the Germans, who are the strongest competitors that we have, have seen the necessity of that and have adopted it, and they are consequently at at an immense advantage in front of us through that one fact.

2036. It comes to this: it is the want of enterprise on the part of the Englishman which has failed, rather than his system of weights and measures?—That I am not exactly prepared to admit. What I say is this: that keeping to the present system makes it more difficult for the Englishman, enterprising though he may be, to adapt his things to the users of the metric system. Other nations, having this system ready to their hand, do not experience that difficulty.

2037. Is not the French manufacturer, who wishes to prepare goods for the English market, prepared to pack up his goods in pound parcels, instead of kilogrammes?—I may mention that a short time ago I had a price list from one of the large retail shops of Paris. I think it was the Bon Marché. The prices were given in English prices per metre, and the memorandum was made against it: "The metre is a little over three inches more than the English yard, and therefore you will be buying at an advantage if you buy ours by the metre."

2038. That Frenchman took a little trouble to make the English customer understand his trade?—He took a little trouble, but he did not go far enough.

Mr. *Godson.*

2039. Were you acquainted with the German trade at the time of their double system, when they had one standard for internal work and another for external work?—My business was always with them for external work.

2040. You do not know that they found that a complete failure, and that they had to abandon the internal system, and adopt the metric system all through?—The only thing I know about it is this: that for some time before they adopted the metric system they had adopted the Zollpfund, which was the half kilo, and that prepared the way for it. This Handelspfund that I spoke of was by the side of the Zollpfund, and the half kilo, and that showed them the disadvantage of it.

2041. Then that was found to be so disadvantageous that they abandoned it, and took the half kilo?—Yes.

2042. You have said that, in your opinion, it would take three years to bring that into practice?—If it were properly taught, and properly put before the people.

2043. Some of the witnesses told us they did not think it would take more than two years?—I should think three years would be probably enough.

2044. It might be done in less?—I should think so.

*Chairman.*

2045. I understand that you also represent the Associated Chambers of Commerce?—I do. I have been actively engaged in promulgating this system for the Associated Chambers of Commerce for the last 12 years, and at almost every meeting, without exception, there has been some resolution in favour of the adoption of the metric system. Last year we had this resolution passed by the Associated Chambers of Commerce, 15th March 1894: "That the Government be urgently requested to grant a Royal Commission or a Select Committee to consider the desirability of adopting the metric weights and measures for the purpose of simplifying the present teaching of arithmetic, for facilitating our general trade and business transactions, and for removing the disability we are now under in dealing with the numerous countries in which the metric weights and measures are the only ones used." I presume that is one of the levers which led to the appointment of the present Committee. I brought the matter prominently forward about 12 years ago. Our own Chamber of Commerce always strongly supported it. One of the resolutions which we brought forward, and which has borne some fruit, was as to the desirability of introducing the teaching in the Board Schools. We have only been able to get as far as the permissive introduction of the system at present.

2046. Is there any other remark you wish to make?—I have nothing else to say, except that within this last few days a friend of mine, who has been actively engaged in the same way as myself in pushing the decimal system, has been successful in getting the Durham County Council, which represents 750,000, to pass a resolution in its favour, and last Wednesday, he was able to get the same vote from the Association of School Boards in London.

Sir *Edward Hill.*

2047. Was that resolution of the Associated Chambers of Commerce a unanimous resolution?—Yes.

2048. And the association represents 80 centres of commercial life?—Yes.

Mr. JOHN PILTER, called in; and Examined.

*Chairman.*

2049. I UNDERSTAND that you come here in the name of the British Chamber of Commerce in Paris?—The British Chamber of Commerce in Paris.

2050. What office do you hold there?—I am an ex-President and a member of the Board.

2051. You, I believe, have been resident for many years in France?—Yes, I have been resident in Paris over 30 years.

2052. You have had a great deal of experience in the English and French trade there?—Yes; I am the senior partner of an establishment in Paris that does a very large trade with agriculturists.

2053. One with which a Member of this House is connected, Sir Bernhard Samuelson?—Yes, Sir Bernhard Samuelson I know very well.

2054. You have therefore had the opportunity of comparing the British system of weights and measures with that adopted in France?—Yes; we are obliged by our trade to compare them daily.

2055. And with what result?—The result of our experience is that the metric system ought to be adopted with the very least possible delay in England.

2056. You are speaking now of your own position as a commercial man trading between England and France?—Yes. We say not only that the metric system ought to be introduced with the very shortest possible delay, but also that its introduction would entail no difficulty whatsoever.

2057. In what respect do you think that that is so?—The system in itself is so simple that it is easily learned, and would entail no difficulty whatsoever in the teaching of it to children, and in the understanding of it by merchants and manufacturers. We find that all the advantages are in favour of the metric system, and all the disadvantages to the charge of the present British system. And we say so, notwithstanding that we are Englishmen. I speak as a member of the Board of the British Chamber of Commerce. We have all been educated and brought up in England; consequently, if we had any prejudice, it would certainly be in favour of the institutions of our own country, because we think that our residence abroad develops in us a respect for the institutions of our country.

2058. And in spite of the affection and respect which you all feel for the institutions of your native land, you cannot go so far as to say that our system of weights and measures is as good or as useful or simple as that which you find at present in France?—We cannot find any argument in favour of the present British system.

2059. Can you give us a summary of your opinion as regards the advantages and disadvantages of the two systems?—One of the advantages of the metric system is that it is at present used by 450,000,000 of people.

2060. That is to say, as we have heard before, by all the civilised countries almost in the world?—Yes, with the exception of Russia, I believe,



*Chairman*—continued.

and to a certain extent, the United States; but they are coming in; and when Great Britain and her Colonies have adopted it, it will become the one universal system. Next it is short, clear, and concise, and is easily learned and understood by a child. In fact, the children understand it straight away, without any difficulty. In France they teach the system by means of a cubic metre divided up into parts. They have a small apparatus, *matériel*, for teaching the metric system, which enables the child to understand it. Their minds grasp it, and we do not think that an English child, when it is taught in school, does grasp the English tables that it is taught. It is taught them, but it always says them more like a parrot. It does not understand them as a child understands the French metric system.

2061. There is a system in one and no system in the other?—Quite so.

2062. Have you forgotten your English weights and measures?—Some of them; a good many of them.

2063. Do you think you would have forgotten it when you had once heard the metric system explained?—No. When once the metric system is learnt it is apparent to the mind, and once understood cannot be forgotten. Then, again, the notation of the system speaks for itself. The metre and the decimetre, the centimetre and the millimetre, and the decametre and the kilometre, myriametre; they tell you exactly what they mean; so that when you see the thing written down it is at once apparent to the mind what it is. The next advantage is that the same weights and measures are applied to all merchandise; they are applied to everything.

2064. From your knowledge of France, can you tell us whether the kilogramme and its parts and the metre and its parts, are universally used?—They are universally used.

2065. Is there much or any employment of the old livre and the old ell?—There is no employment at all. In fact it is penal to use it.

2066. We were told that amongst the country people they still reckon in sous?—No; they may talk about sous, but it is more of a slang language than anything else. Every transaction takes place in France in francs and centimes, and it would be penal to do otherwise. In fact, several years ago some of the sellers of newspapers on the streets were selling a paper for a sou, and that was stopped at once by the police.

2067. Does that apply also to weights and measures?—I think so. I do not know of any exception to it.

2068. You have never in your own experience, and you have gone about a good deal, seen buying small articles by other weights or measures?—No.

2069. You have never found that they use the old system?—They talk of the livre, but that is half a kilo.

2070. They never weigh with the old livre?—No, never. Then another advantage is that the

 units,

*Chairman*—continued.

units, the metre, the litre and the gramme, are convenient measures, and they bear a distinct relation the one to the other. That is one of the great advantages of the metric system. Consequently measures, however great or however small, when once you know the metric system, become apparent to your mind. It is not an effort to know what you are talking about. You know it; you see it in your mind. In making calculations a very much smaller number of figures is necessary. I have not made any calculation to find out what is the number of figures that are necessary, but I should say that there is a saving of considerably over 50 per cent., and consequently the chances of error are very much diminished.

2071. With regard to an English firm doing a foreign business, what have you to say?—As a matter of fact, English firms are obliged to know the metric system now. I have a document here, which I believe to be an official document; it is a declaration of origin, signed at the Mansion House, with regard to some goods that were sent to France, and it is stated on it that the weight must be stated in kilos.

2072. Is that a regulation of the Customs?—I suppose that is an English official document. It is only stated for the convenience of the French Custom House, but still it shows that the English manufacturer must know the metric system.

2073. That is to say, the port to which these goods were consigned would not have passed them unless they had been invoiced in kilos?—Quite so. You must make your declaration to the Custom House in kilos.

Mr. *James Stevenson.*

2074. The duties also are leviable in kilos?—In kilos; and any false declaration, or any error in calculation, entails fines, which are, to say the least, three times the amount of the duty.

*Chairman.*

2075. Of course you are aware in all scientific calculations the system is used throughout the world?—Yes, quite so. One of the greatest advantages in favour of the metric system is the time that would be saved in the education of children.

2076. You have already told us that the metric system is very readily taught by example and by models?—Quite so. It is very readily taught, and it is understood at once by the child. The child grasps it.

2077. I do not know whether it is worth while taking you through the disadvantages of the British system. I think we are pretty well aware of those?—Another of the advantages of the metric system is that calculating machines are coming in very shortly. They will probably be ere long almost as common as typewriters, and we shall find that they will facilitate a great many calculations.

2078. They would be arranged for the decimal system?—They would be arranged for the decimal system; of course they could be, but with very great difficulty, arranged for the present system. In fact, the only advantage in favour of the present system is the fact that it exists.

*Chairman*—continued.

2079. And if it did not exist?—Certainly I do not think anyone would invent it.

2080. According to you, I understand, then, all the advantages are in favour of the metric system and all the disadvantages belong to the present British system?—That is distinctly the opinion of our Chamber.

2081. And you speak not only for yourself as a trader, but you speak in the name of the British Chamber of Commerce in Paris?—I speak in the name of the British Chamber of Commerce in Paris.

2082. Can you tell us why, in your opinion, there has been such delay in adopting this system. If it is really so very much better, is it not strange that we have gone on so long with this disadvantageous system?—Simply because it is not understood. I do not think English people as a rule know what the metric system is. If they could grasp that it is something to forget and nothing to learn, they would have adopted it long ago.

2083. Do you know any case in which the metric system has been adopted where it has not been found to work?—I do not know any case in which that has ever occurred.

2084. And it has been adopted to your knowledge in a great many countries of all sorts and kinds?—Yes, with the exception of Great Britain and her Colonies, and Russia, I think almost universally.

2085. In Turkey, for instance?—Yes; I have had experience in Tunis. I have property in Tunis, and I am obliged to spend a certain part of my time each year there. The people of that country, the Arabs and the negroes, have had introduced amongst them, quite lately, the decimal system of coinage, the French system; and within the last few months, perhaps eight months, the metric system of weights and measures has been introduced, and they grasp it easily and without difficulty. They had before then a system of 12 saa's to the ouiba, and 16 ouiba to the caffiis. But they have learned to understand the litres and the metres very easily.

2086. So that not merely civilised countries, but what may be almost called uncivilised countries, are able to appreciate the value of the metric system?—Yes.

2087. Do you think there is any reason why, in the United Kingdom, there should be any greater difficulty in introducing the change than there has been in other places?—No difficulty whatever, except the magnitude of the trade. It would require a certain time for the new instruments of weights and measures to be made and to be supplied to the public.

2088. You would like, first of all, to see the use of the weights and measures made legal side by side with the Imperial system?—I think it ought to be made compulsory with the slightest possible delay.

2089. Would you have an Act of Parliament making it compulsory on the 1st January 1896?—That, I do not think, would give sufficient time.

2090. What time would you allow?—The shortest

*Chairman*—continued.

shortest time possible. The permissive period would be a period of trouble to the trade, and the shorter that time was made the better it would be.

2091. But I understand you would make it permissive during a certain period?—Only during a time which would be sufficiently long to allow the new measuring and weighing instruments to be made and supplied.

2092. And would 12 months or two years be necessary for that, in your opinion?—As far as the metric system is concerned, one year would be quite sufficient for the country to grasp it, it is so simple; but it would not be a sufficient length of time for the public to be able to get hold of the necessary weighing and measuring instruments.

2093. Do you think we ought to wait till all the children are taught the metric system, and until they are grown up?—Decidedly not. The children would learn the metric system in a few months.

2094. And you would not wait until they were grown up in order to bring it about?—Decidedly not.

2095. Many objections have been raised, as you will have heard, to the adoption of this system. Do you think that your Chamber of commerce is in a position to answer any of those objections better than you can yourself at this moment?—I think I can myself answer most of the objections. At the same time, I am sure the Board of my Chamber would be very glad to draw up a report, if necessary, to any objections that were raised.

2096. You have heard the evidence of the previous witness, Mr. Rowlett?—Yes.

2097. Have you any remarks to make upon that. Do you agree with him generally in what he says?—I do not understand anything about the yarn trade at all. I do not think that it is necessary that there should be three years' delay before making the metric system compulsory; but with the general tenor of Mr. Rowlett's remarks I am quite in accordance.

2098. Have you any remarks to make with regard to the difficulties which have been raised on his evidence?—With regard to the sizes of pipes which a member of this Committee mentioned, we have those same pipes sold in France with the French measures, and we experience no difficulty whatsoever. Instead of it being a three-inch pipe it is a pipe of a certain dimensions in French. That is all. We, ourselves, do a large trade in iron pipes. The interior and exterior diameters are given in millimetres. It is a very easy thing to understand.

2099. You do not think the English people are so stupid as not to understand the words millimetre or kilogramme, just as they understand the words barometer and thermometer?—The system is so simple that any child can understand it. I think what the negroes and Arabs in Tunis are able to understand the British public should also be able to understand.

2100. The negroes appreciate the words metre and litre?—Yes.

*Chairman*—continued.

2101. And you do not put our population below the level of the Tunisian negroes?—I do not.

Sir *Samuel Montagu.*

2102–3. Can you fix any time which is involved in teaching a child the metric system in France?—If a child were 12 years old, I should say that three months would be ample to make it understand it, and to make it understand it amply. My own children have understood it very easily when they have been taught, because in the schools they have a small apparatus *matériel* to teach them and show them what it is.

2104. Would you advise that a similar model should be introduced in our schools here to teach the children the metric system?—Decidedly so.

2105. Are these models expensive at all?—Not at all expensive. They are very cheap indeed.

2106. Could you easily send over the models that are used in the schools?—I can easily do so.

2107. In France the Government provide them?—Yes, at a very small expense.

2108. Are you aware that the coins in France have a certain weight; that the five franc-piece weighs 25 grammes, and could be used when it is new as a weight?—Quite so.

2109. Have you ever compared in your own mind the practice in shops in France and in England in making out bills. For instance, at big shops, like the Louvre, is it not the case that they can calculate almost as fast as they write?—Quite so. I have not made any special comparison between the French system of calculating in shops and the English system.

2110. They have not, in France, two people, one to check the other, as they have here in big drapers' shops?—No, in the big drapers' shops they have not.

2111. You may be aware that in the big drapers' shops in England they have somebody to check the invoices?—They do not in France when you go to buy. I do not know whether they are checked afterwards. When you go to buy they put down the calculations at once.

Sir *Edward Hill.*

2112. I understand that you do not anticipate any difficulty whatever in the adoption of the metric system?—None whatever.

2113. And your knowledge of the system is such as to lead you to value it very much?—I think my knowledge of the system as it is used in France is complete. I am the senior partner of a large house in Paris, and we are doing a large trade, and I have never seen any difficulty whatsoever in regard to the metric system.

2114. And, in your opinion, is it a great disadvantage to the English trade to have its present system?—It is a very great disadvantage.

Sir *John Barran.*

2115. Do I understand it is a great advantage to France that she has this system in connection with her foreign trade?—Yes, decidedly; it is

Sir *John Barran*—continued.

an advantage to her in her foreign trade as well as in her home trade. All the calculations are so much easier.

2116. Her trade, for example, to Argentine?—Quite so.

2117. That is a very large trade?—I am not prepared to say the amount of her trade to Argentine, but I should say it is a considerable one, because there are large lines of steamers go there from France.

2118. You consider that she has an advantage owing to her system of calculation?—Yes.

2119. We have heard that the Germans are great competitors with us?—Yes.

2120. We have heard that they are pushing their trade into all parts of the world. Am I to conclude that you are of opinion that they have an advantage in that respect, because their system of measurement is adapted to the different countries?—Decidedly so. Any country who uses the metric system has an advantage over people using the British system.

2121. And our trade with the Germans would, in all probability, be much facilitated by having the metric system?—I should say so, but I have no experience in connection with the German trade. I am quite sure it would be so; but that is an impression.

2122. We sell the Germans a very large quantity of yarn in the Bradford trade?—I do not know anything about the trade between England and Germany. Mine is between England and France.

2123. What is your trade?—I am in the agricultural machine trade.

2124. But, on the whole, you think it would be a great advantage to England to adopt the metric system?—An undoubted advantage.

Mr. *Godson.*

2125. You stated that, in your opinion, half the number of figures would be saved in calculations?—I think that is a low estimate.

2126. The last witness put in a little table, according to which, in the English system, it requires 78 figures, and in the French system 33 figures, to make the same calculation?—Mine was an impression; it was not the result of a calculation.

Mr. *James Stevenson.*

2127. You mentioned that the metric system was already being introduced into America?—I do not know that I said it was being introduced; I believe they are taking a step in that direction.

2128. Then there are some people in America wish to see it adopted, just as there are in England. There is a movement and a discussion upon the matter?—There is a movement.

2129. Has it gone so far as to affect actual trade?—I cannot say that it has; I do not know.

2130. Are you aware that people in France, who are engaged in shipping to this country crystallized fruits packed up in ornamental boxes, send their travellers round and undertake to quote to grocers in this country these fruits at a price per English lb. in English shillings and pence. Is there not a trade done in that way?—I do not know the crystallised fruit trade at all. I did not know that the practice you speak of is adopted. If they were to sell these goods, deliverable at their own place, it would be a penal offence.

Mr. *James Stevenson*—continued.

2131. But the commercial traveller in England, in the case I refer to, sells the goods delivered in London in English weights, and at English prices?—It shows the intelligence of the man who puts himself on a level with his customers.

2132. And do not you think the English trader ought to reciprocate by adapting himself to the language of the customers of the foreign nation which he wishes to deal with?—I think he ought to put himself on a level with his customers.

2133. An honourable Member (Sir Samuel Montagu) asked you whether there was some relation between the weights and the coins?—Yes.

2134. So that you may use coins in France instead of weights?—Yes.

2135. Are you aware that that is also true in England?—No.

2136. You were not aware that three bronze pence make an ounce?—I do not know.

2137. And five bronze half-pence make an ounce, and ten bronze farthings make an ounce?—That is an advantage of the English system which I did not know.

2138. Were you aware that an English half-penny is exactly one inch in diameter at the Mint?—I did not know that at all.

2139. So that persons who have forgotten their foot rule can make out the required dimension by putting a sufficient number of halfpence together?—I did not know that.

2140. You have not heard of these advantages of our system?—No.

Mr. *Jasper More.*

2141. Do you find people in Paris anxious that the decimal system should be introduced in England?—Amongst our own community, and amongst all French traders that we meet doing business with England, they are very desirous it should be employed. When you speak to a Frenchman of the English weights and measures he does not quite understand. He seems to think how awkward it is that they should be so.

Mr. *Godson.*

2142. Are the measurements sent out by the English manufacturer according to the French or the English system. Take the case of a threshing machine; there are certain spaces. Are those in French or in English measurements?—They would be according to English measurements in many cases, and in French measurements in other cases if so ordered.

2143. I suppose where specially required to be in French measurements this could be done?—Yes, if so ordered, but otherwise a threshing machine would be four feet or six feet, as the case may be.

Sir *Samuel Montagu.*

2144. Have you taken special interest in the change to the metric system?—Yes, I have.

2145. Are

Sir *Samuel Montagu*—continued.

2145. Are you aware that there is a Commission sitting in the United States for purposes similar to those of this Committee?—I was not aware.

2146. Are you aware that they have made the metre the legal standard, and the metric system the legal standard, and made their present weights and measurements proportionate parts of the metric system?—I know that some measure had been taken, but I did not know exactly what that measure was.

2147. I suppose you have not gathered from the statement of one of our Members that our gold and silver coins have no relation one to the other in round figures; that the sovereign and the shilling are all in odd fractions?—No.

2148. And that the old penny used to be an ounce, and now it takes three to the ounce in modern pennies?—Yes. I desire to put in a letter from the York Street Flax Spinning Company, Limited, of Belfast, one of the largest establishments in the north of Ireland. The Paris manager says: "Dear Mr. Pilter,—I am very glad you are able after all to go to London, there to plead for our chamber the worthy cause of the decimalisation of moneys and the adoption of the metric system of weights and measures. May you succeed in giving a great impulse to the movement by which our country may at last make a trial of these two systems. A trial would soon mean absolute adoption. I think I

Sir *Samuel Montagu*—continued.

have told you before, but I take this opportunity of reminding you that my firm in Belfast extensively use both decimalisation and the metric system. For instance, early in every month we make out a table of each set of goods we produce in our factory and buy outside, and average the whole in decimals. I beg to enclose copy as last received, also a batch of recapitulations dating as far back as June 1880, which shows that to save the time and labour of bringing each calculation down to £ *s. d.*, we leave it in pence and only bring it out in sterling at the end of each shipment. Furthermore, dealing as our head office does with the majority of the markets of the world, most of which have preceded Great Britain in the path of light and simplicity, we have long since found it necessary here again to save the time, labour, and risk of errors by making all our lapping, measuring, and weighing machinery show the simple metres, decimetres, centimetres, millimetres, and kilogrammes, decigrammes, centigrammes, and milligrammes as well, and at the same time as their so complicated British equivalents. I have little doubt that great is the number of concerns trading abroad who have found it necessary to do the same. Wishing you a good journey, in every sense of the word, and with kind regards, I am, very sincerely yours, *Ch. MacCarthy Spiers.* Please return receipts herewith, at your convenience, when done with."

Mr. EDWARD JOHNSON, called in; and Examined.

*Chairman.*

2149. YOU are the secretary of the new Decimal Association, and have acted in that capacity for nearly five years?—That is so.

2150. We had the advantage some time ago of hearing the evidence of Mr. Dowson, who is the chairman of your association. Have you any remarks to make to the Committee with regard to any evidence you or your association may have received since that date?—I believe Mr. Dowson put in a list of Consular Reports. I have received some further reports from British Consuls abroad since then, from which an extract has been taken.

2150*. Is that from the English Consul at Bordeaux?—It is from the English Consul at Bordeaux. I have here the report in question, and the letters from the Consul.

2151. What does he say?—He says, "There can be no doubt that substitution of the simple metric system for the present complicated British standard of weights and measures would be very gladly welcomed——"

2152. Welcomed by whom?—By the traders over there; by the British traders, he must must mean. Then he says, "As such a step would greatly facilitate (and in consequence most probably increase) trade, there are probably not a few customers in this country, quite apart from those in the East, who, rather than submit to being puzzled by the difficult British weights and measures in the calculations, prefer to deal with firms who employ the comparatively simple



*Chairman*—continued.

system of measurement and weights used by themselves."

2153. So that his opinion is strongly in favour of the adoption of the metric system in this country?—Yes.

2154. What have you got to say with regard to any evidence that you may be able to give the Committee with regard to the opinion of the school boards on this question?—It was in the year 1890 that I took up this question with the school boards, and I corresponded with the whole of them throughout the country. Nearly all expressed their approval of the aim of the New Decimal Association. In confirmation of this, I would state that most of these school boards presented petitions to the Education Department urging that the principles of the metric system should be taught. As the result of this, the Code of 1891 and subsequent years has required that the scholars in Standards V., VI., and VII. should know the principle of the metric system.

2155. Can you tell the Committee whether, if you were to take 100 boys out of Standards V., VI., and VII., you think they would know practically anything about the metric system?—I am afraid from what I hear that it is not practically taught.

2156. That is to say, although it is theoretically required, it is not practically brought before the boys?—I am told that it is not enforced, because the inspectors do not examine in it at present.

*Chairman*—continued.

I know that many school boards have been prepared to teach it properly, but they have found Inspectors do not ask questions, and they have not followed it up so well as it was hoped they would do.

2157. Then, in your opinion, is it desirable that more pressure should be put upon the Education Department, or upon the Inspectors, to require that instruction in this subject should be given?—Certainly I should like to see that.

2158. Have any school boards authorised you to express an opinion that they are in favour or otherwise of the adoption of the system?—Yes, several school boards have allowed me to go so far as to publish their names as identified with the movement which aims at the introduction of the metric system. I will read the names of them: Ashton-under-Lyne, Birmingham, Burslem (Staffordshire), Burton-on-Trent, Coventry, Derby, Hartlepool (West), Hove, Hull, Ipswich, Leeds, Leith, Leicester, London—the old London School Board, not the present Board—Manchester, Norwich, Oldham, Plymouth, Salford, Sheffield, Swansea, Wigan, Wolverhampton, Bradford, Dalton-in-Furness, Fleetwood, Margate, and Barnsley. The seven last-named have, within the last week or two, passed resolutions in favour of the adoption of the metric system, knowing that the Select Committee was sitting to inquire into the subject.

2159. What about the Association of School Boards?—That was referred to by the previous witness. The resolution was passed by the Association of School Boards, which is an organization which includes the school boards of the metropolis and of almost all the large cities and towns in England and Wales.

2160. So that the resolution of which we have heard from a previous witness would show that the school board generally, not only those you have mentioned, but a large number of other school boards hold the same opinion?—That is so, and you will notice that in that resolution it is urged that it should be taught more efficiently than at the present time. The resolution reads:—

2161. "That in the meantime this Associatian would impress upon all managers of schools the importance of more systematic instruction in decimal arithmetic and in the knowledge of the metric system as laid down in the Code." Would you be in favour of decimal fractions being taught as soon as the children have learned their numeration before they begin vulgar fractions?—That seems to me the proper order in which to take the teaching of decimal fractions.

2162. During the sittings of this Committee have you received any official intimations from clerks of town councils or other bodies in favour of, or with resolutions on the subject?—I have, and so far as I am aware it is the first time that the town clerks and town councils have been approached on the subject at all.

2163. Will you hand in a list of the town councils?—Yes, and of the resolutions which they have passed. I may state that other town councils have shown a disposition to favour the movement, but have not thought it advisable to interfere in the matter whilst the Select Committee was inquiring into the subject.

2164. Have you anything to say with regard to county councils?—I wrote to several of the county councils, and as a result, I think I may say that on the 1st of this month the County Councils of Monmouth and Durham passed resolutions in support of the adoption of the metric system of weights and measures.

2165. Do you think that the working classes are becoming alive to the importance of the question. We heard from Mr. Rowlett to-day that in Leicester the working classes are strongly in favour of the adoption of the system. Have you anything to add to that from your experience?—I think you have already heard that the Trades Congress of the country, which I think are taken to represent the working classes generally, have unanimously passed a resolution in favour of the adoption of the metric system. But with regard to the County Council of Durham, there is a point which is evidence to some extent that the working classes there are alive to the importance of the matter. On that council there are 20 members who are working miners, and I have the authority of the mover of the resolution for stating that those miners were unanimously in favour of the resolution. In fact it was carried without a single dissentient, and the County Council of Durham represents a population, as you heard from Mr. Rowlett, of 750,000.

2166. Have you received any information from Scotland of the Scotch opinion on this matter?—I have a letter from the secretary of the Edinburgh branch of the association, and he writes that the following bodies have passed resolutions in favour of the metric weights and measures being adopted, 1895. March 27th, Convention of Royal and Parliamentary Burghs. April 9th, Edinburgh and District United Trades Council; 17th, the Scottish Chamber of Agriculture (Directors); 24th, the Scottish Institute of Accounts, Glasgow (Council); 26th, Edinburgh Chamber of Commerce and Manufacturers (Directors); 30th, the Merchant Company of Edinburgh; 30th, Scottish Trade Protection Society (Directors), Institute of Accountants and Actuaries in Glasgow (Council). May 1st, the Highland and Agricultural Society of Scotland (Directors); 8th, Edinburgh Agricultural Association (Council). The Edinburgh Merchants Association; 9th, the Society of Accountants in Edinburgh. When forwarding me the foregoing list, the Secretary of the Edinburgh Branch remarked that the resolutions he mentioned were the outcome of an invitation he sent out to consider the subject, and not one public body had resolved against it, most of the resolutions being unanimous. On the 14th of this month the North-East Coast Institution of Engineers and Shipbuilders unanimously passed the following resolution: "That this Institution, learning that a Select Committee of the House of Commons is considering our system of weights and measures, is strongly of opinion that the early adoption of the metric system would be a national benefit, would greatly promote the expansion

*Chairman*—continued.

expansion of our foreign trade, and also simplify business transactions at home."

2167. We have heard from a previous witness that the old weights and measures are employed in Belgium, and that goods can be purchased over the counter and invoiced in that country according to the old system. Have you made any inquiries into that statement?—I wrote to the British Consul in Brussels, and I have from him a reply forwarding a print of the Belgian Law of the 1st October 1855, as to weights and measures, which I now put in. "He informs me that this law is still in force, and that the only lawful standards are the metre for measure and the kilogramme for weight. He adds that selling by the ell or other old weights and measures is illegal and, if detected, is made penal under Section 6 of the Law of 1855; this section states that there is a penalty of 10 to 20 francs for those who possess or use the weights and measures prohibited by Article 4, and Article 4 states that it is forbidden to possess or use weights and measures other than those established by law. In a further letter received from the Vice-Consul, dated 25th April last, he says: 'I do not believe that any illegal weights and measures are still used in any part of this country, and decidedly not without fine being imposed in case they are found out.'"

2168. What evidence on this point have you with regard to France?—I have corresponded with the Secretary of the British Chamber of Commerce in Paris. You have had evidence with regard to that, I think.

2169. It agrees with the evidence which Mr. Pilter has just given us?—It confirms it, and quite bears out what Mr. Pilter states.

2170. I think we have heard from the President of your association, Mr. Dowson, the objects which you have in view, and which you have had in view. Perhaps you may have some remarks to make which may be interesting to the Committee with regard to the work done by your association?—Perhaps I may tell the Committee that when the association first commenced active work I observed that the tone of the Press was decidedly hostile. Lately I have been surprised at the change that has come over the articles which have dealt with the subject. It seems to me that the subject is now better ventilated and more thoroughly understood, especially so since several public bodies have interested themselves in the question. A large proportion of the leading journals are now decidedly in favour of the metric weights and measures being adopted, and we have a collection of extracts from the newspapers, which I shall be glad to show the Committee if they desire it, in proof of this.

2171. You do not find that there is nearly as much objection as there was formerly; is there any objection by any of these newspapers?—I have not noticed any objection in the newspapers lately.

2172. In the course of your business for the association, I suppose you have sent out letters, and so forth, inquiring what they think?—I have. I have written to various people and the representatives of public bodies. I should think, during the time I have been connected with the association, I have sent out certainly 100,000 letters.

*Chairman*—continued.

2173. What has been the result of that?—As the result of that, I can state distinctly that I know of no public body whatever which is opposed to the introduction of the metric system, and really very few individuals.

2174. Have you been able to find out what the chief objections are of those individuals who do object, and have you taken any pains to remove them, if possible?—So far as available time permitted, I have done so; but the objections which have come before me have generally been from people who have not really studied the question. Some of them have thought the decimalisation of our present system of weights and measures would be advisable; but I think when they have realised that it was going to leave us out of harmony with the rest of the world commercially, many of them have changed their opinions, and have become advocates of the metric system.

2175. You think that, on the whole, the subject is advancing very quickly?—I think that the feeling is very much more in favour of it than it was two years ago.

Mr. *James Stevenson.*

2176. Your association is called the New Decimal Association. Was there a former association?—There was an association many years ago. I believe it went out of existence some 13 years since.

Mr. *Jasper More.*

2177. That association attempted to introduce decimal coinage before dealing with weights and measures, did it not?—I believe that association aimed at the introduction of decimal coinage first.

2178. And they considered they had made a mistake in doing so; that they ought to have dealt with the weights and measures first?—I think so.

Mr. *James Stevenson.*

2179. Does your association commit itself to any view on decimal coinage?—I understand that is not a question before the Committee.

2180. My question is, does your association commit itself to any view on decimal coinage. Does it, as one of its leading features, contemplate decimal coinage?—It does. That is one of its aims.

2181. But, in the meantime, it advocates decimalising weights and measures?—Yes.

2182. You put the one before the other?—Yes.

2183. Have you a copy of the circular which you sent round to all these public bodies explaining what the object of your association is: I presume the circular was identical?—The circular was identical. I did not anticipate that would be called for; but I should be very pleased to send a copy of it to the Committee.

2184. I should like to see a copy. Do these trade union bodies that you have referred to clearly

Mr. *James Stevenson*—continued.

clearly understand that the ultimate object of this association would be the abolition of all the usual weights and measures, pounds, ounces, feet and inches?—I was not present at the meetings when these trades councils were addressed; but I have it from the gentlemen who lectured before them at the meetings of the Manchester Trade Council, the Sheffield Trade Council, and the Glasgow Trade Council, that he informed them thoroughly upon the whole subject, and he had no difficulty whatever with them.

Mr. *James Stevenson*—continued.

2185. I observe that one of these resolutions (I forget which it is) is merely expressed in favour of a decimal system; they say nothing about the metric system?—I do not think they understood that there was any likelihood of the two aspects of the question being separated when it was brought before the trades councils.

*Tuesday*, 21*st May* 1895.

MEMBERS PRESENT:

Sir John Barran.
Mr. Crombie.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Mr. Jasper More.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Stewart Wallace.
Mr. Webster.
Mr. Wrightson.

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. ROBERT GIFFEN, called in; and Examined.

*Chairman.*

2186. YOU are at the head of the Statistical Department of the Board of Trade?—The Commercial, Statistical, and Labour Departments of the Board of Trade.

2187. And of course you have paid considerable attention to the question of the trade of the country?—Yes, the statistics of the trade of the country generally.

2188. You are aware that this Committee is considering the question of the present system of weights and measures and as to how far it is desirable or otherwise to introduce a more simple system than that at present in vogue; we do not at present propose to ask you any questions with regard to the system of weights and measures; but your evidence will be of interest and importance, inasmuch as you will see at once that the question of making a system of weights and measures which corresponds to that adopted in almost every civilised country would depend greatly on the amount of our foreign trade; it is rather in the foreign trade than in the home trade that the desirability of adopting a system in consonance with that of other countries becomes important; if we had no foreign trade and no relations with other countries using a metrical system of weights and measures there would be less question as to the necessity or desirability of our adopting that system?—I take it from the Committee that that is the point which you are considering.

2189. The question, therefore, arises for our consideration as to the relation between the extent and amount of the foreign trade of the kingdom and that of the home trade?—It is upon that point that at your request I have prepared a short statement.

2190. Will you tell us shortly what you have to say on that subject?—I should like to begin by referring to a common impression as to the extent of our foreign trade which is based upon the idea that that foreign trade consists, first, of what are called imports, and, secondly, of what are called exports, these exports, moreover, being usually identified with exports of British and Irish produce only. Even on this showing the



*Chairman*—continued.

figures of our foreign trade appear very large. The imports in 1894 were 408,000,000*l.*, and the exports of British and Irish produce 216,000,000*l.*, or 624,000,000*l.* in all.

2191. When you speak of the exports of British and Irish produce, do you mean exports to foreign countries only, or do you include the colonies?—The colonies, in this sense, are spoken of as foreign countries. This figure of 624,000,000*l.* is a large figure, but it does not show what our foreign trading interests really are. To these two sums should be added exports of foreign and colonial produce, 58,000,000*l.*; trans-shipment trade (imports and exports), about 20,000,000*l.*; bullion and specie (imports, 38,000,000*l.*, exports, 28,000,000*l.*), 66,000,000*l.* altogether, the total of these three items being 144,000,000*l.* Adding those to the above sum of 624,000,000*l.* we get a total of 768,000,000*l.*

2192. That represents all that comes in and all that goes out?—Even that does not represent all that comes in and all that goes out. I have certain additions to suggest which ought to be made. I may mention, before I go further, that two-thirds to three-fourths of those figures which I have already given you is business done with foreign countries, in most of which, I believe, the decimal system, if not the metrical system, of money, weights and measures prevails. In addition to those figures which I have given you, we have a vast shipping interest. I estimated a good many years ago (I think it is about 13 years ago), that this shipping business brought in a gross income of about 60,000,000*l.* sterling per annum, and that income, I believe, cannot be less, or at any rate much less now, notwithstanding the great reduction of freights which has taken place in the interval.

2193. Is it your opinion that that 60,000,000*l.* ought to be added to the total of 768,000,000*l.* in order to get the income and outgoings?—That sum or some very large sum.

2194. Is that the total?—No, it is not the total. There are other things to be considered.



2195. £60,000,000

Mr. *Stevenson.*

2195. £60,000,000 of freights?—It is not merely the freights in the direct trade between this country and other countries, but the freights which are earned by our shipping all over the world, shipping that goes between foreign countries, or between colonies and foreign countries, quite apart from the direct trade of the United Kingdom itself.

2196. Do you mean outside the 60,000,000*l.*?—No; but I mention it to make the sum look more reasonable than if you were thinking of the direct trade alone. Then, in addition to that, there are profits and commissions which are earned by our merchants, bankers, and brokers which are of the same nature as an export, because they lead to an import upon the other side.

*Chairman.*

2197. How much is to be added for the bankers and brokers?—I have suggested, but it is not the result of any very exact calculation, that it might come to a sum of about 20,000,000*l.* sterling. I do not put that forward as a calculation of the same nature as that which I made for the shipping. In addition there are large investments abroad yielding an income which is partly brought home, but which is also in part left abroad, and I think the amount of that which usually comes home may be considered to be about 60,000,000*l.* sterling. It is not the whole amount that is earned by our investments abroad. Our annual foreign trade, using the word imports and exports with rather more latitude than is the case in ordinary language, cannot thus be far short of a sum of 1,000,000,000*l.* sterling. We receive or pay this large amount annually in our dealings with foreign nations. I may say that I put the round figure of 1,000,000,000*l.* sterling partly because the year 1894, of which I have given you the exact figures of the imports and exports, was a year rather below the average.

2198. You think 1,000,000,000*l.* would be a fair average?—I think it would be a fair average at the present time, taking all things into account and taking a fair average year.

2199. With regard to the home trade, what have you to say?—With regard to the home trade there is no corresponding figure in our trade with which to compare this sum. It would be impossible, even if we had better and more complete home statistics than we have, to say what the different groups of people trading at home import from each other and export to each other in the course of the year; but in any case it seems to me the sum of 1,000,000,000*l.* would be a large item even in the home trade, speaking of imports and exports in that very general sense.

2200. Then you would not be inclined to say that the foreign trade of the country is small in comparison with the home trade?—I think not in any shape or form. I have never seen any statement which would make it look a small thing.

2201. As compared, I mean, with the home trade?—It is not so big as the home trade, that is quite evident, but it is a very large figure.

2202. You can, I suppose, give us some sort of an idea as to the comparison of the net income derived from our foreign trade with the net income of the nation from all sources, and thus we may be able to arrive at some conclusion?—That was my idea, that although we cannot make the direct comparison of the figure I have given you with any corresponding figure in the home trade I think it may be possible to make some comparison that would throw light upon the subject.

*Chairman*—continued.

2203. Are you prepared to do so?—The statement I would make upon that subject would be this. We may compare the net income derived from our foreign trade, shipping, and investments with the net income of the nation from all sources. Putting the latter at between 1,500,000,000*l.* and 1,600,000,000*l.*, at the present time we have to compare it with a net income from abroad of about 300,000,000*l.*, this being the amount of the imports less the re-imports, with a further deduction for the raw material contained in the imports which is afterwards re-exported in a manufacted form and so appears among the exports of British and Irish produce. That is the mode in which what I call the net income from the foreign trade judging by the imports would appear; that we get 300,000,000*l.*, which is really used as income in this country and consumed, from our foreign trade and investments. Then I make a further comparison of this sum of 300,000,000*l.* by taking it from the other side of the account and showing how we earn it. This statement is as follows: First, net value of exports of British and Irish produce less raw material previously imported and which is contained in manufactured articles exported. I estimate this at about 160,000,000*l.* sterling. Second, earnings of shipping (the figure which I gave you before) 60,000,000*l.* Third, brokerages and commissions, 20,000,000*l.* Fourth, income of investments brought home 60,000,000*l.* Total, 300,000,000*l.* Then, as 300,000,000*l.* is to 1,500,000,000*l.* or 1,600,000,000*l.*, we may say that one-fifth part of the income of the people of the United Kingdom is dependent upon foreign trade, investments, and shipping.

2204. That would include, not the mere trade income, but the total earnings of the nation?—What are considered to be the aggregate of the individual incomes of the people of the nation, each man reckoning his income as he usually reckons it.

2205. So that one-fifth of that total is the amount according to your estimate of our dealings with foreign countries?—Our dealings and interests in foreign countries, including, of course, in foreign countries for this purpose, our Colonial Empire.

2206. Have you any means of ascertaining what amount of that 300,000,000*l.* you would put to the dealings with our own colonies in which the same system of weights and measures is adopted?—About one-third belongs to our colonial business. Generally speaking our dealings with foreign countries properly so called, and our dealings with our colonies, are represented by the figure of two-thirds on one side and one-third on the other. I think as to some of the items we sometimes find instances in our imports which may

*Chairman*—continued.

may amount to three-fourths from foreign countries, but when you put all the items together I think the common proportion is two-thirds to one-third.

2207. Has it ever come before you in your experience, or have you any personal opinion in the matter that you could express to the Committee, with regard to the special questions upon which we are engaged, that of the weights and measures, from your own and from your official experience?—I do not think that I would be prepared to speak upon it from that point of view, especially as the question of weights and measures is not in my department. At the Board of Trade we have a special department for dealing with that subject.

2208. We have already had evidence from Mr. Turner, but what I meant rather was that you, having had great experience in looking to questions of trade, and so on, can perhaps give us, not officially, but from your personal knowledge or observation, the view which you may entertain in the matter?—I may say that I am quite aware of the pretty extensive feeling amongst people who send goods to foreign countries that they suffer inconvenience from not having the same measurements as they have in this country. That I can speak of from a very general experience of communications that have been made to me at different times.

2209. And would you, personally, have any objection to a recommendation that we should adopt the same system ultimately as is adopted in other civilized countries?—I would not like to go so far as that. I should rather wait till I see the evidence which you are collecting now.

2210. Perhaps you have not read the evidence of the Committee of 1862?—I think I did. I studied the thing a good deal at that time, but I have had no occasion to discuss it publicly at any time, and I have never formulated opinions upon the subject. It seems to me a question of expediency as to how far the Government can go at any time in promoting this object. That it would be desirable, if it can be done without any drawbacks, is, I think, perfectly clear; that it would be an advantage if we had the same system of weights and measures which the great majority of foreign countries appear to have.

2211. You are aware that similar changes such as that proposed have been made in other countries without any very great difficulty or without great lapse of time?—I believe that is so.

Sir *Samuel Montagu.*

2212. Have you to make calculations of the foreign weights that are shipped to this country, in the metrical system?—We have a great difficulty of that kind, and that is one of the things which we are continually at work upon in my office. The trade statistics of foreign countries, and the tariffs which they use, are expressed in money weights and measures of a kind which are difficult for us to deal with; and I think I am referring to a difficulty which we had practically in a Committee before which I was examined in this very room about 15 or 16 years ago, on the sugar bounties, a question in which we had to deal very extensively with movements of the sugar trade and with calculations of duties and things of that kind; and it was a practical inconvenience in giving my evidence before that Committee that sometimes I was mentioning tons and sometimes metrical tons, sometimes kilogrammes and all sorts of weights and measures; and there was the utmost difficulty in keeping the thing clear before the Committee and in translating one into the other. I had acquired a great facility in the matter and could translate the tons into the other things whilst I was speaking; but of course it was a great difficulty for members of the Committee to follow, and I recollect it presented a real difficulty in the discussion of that question at the time.

Sir *Samuel Montagu*—continued.

2213. Since that time you are aware that other countries have adopted the metrical system, such as Japan and Turkey, and, if it were possible in this country to adopt the metrical system, do you think it would be a facility in regard to the statistics that your department has to furnish?—Not so much a facility to the clerks at work in my department as a facility in the handling of all these questions by persons who are studying them.

Sir *Edward Hill.*

2214. I suppose you keep your statistics in decimals, do you not?—We keep our statistics in the weights and measurements of this country, but we have continually to deal with foreign statistics, which are kept in that form. But if you turn to such a publication as our "Statistical Abstract for Foreign Countries," you will find that, for convenience sake, we are sometimes obliged to give the statistics, first of all, in the weights and measures of the country, and then a translation of them into English weights and measures for the convenience of those who are to use that return.

2215. That you feel to be an awkward system, I should think?—It is a very serious labour, undoubtedly, because people in this country wish to have the thing in English weights and measures. Then you translate them, and sometimes when you translate back again you find that it would be very convenient indeed to have had the original weights and measures before you, because things get astray sometimes.

2216. You have stated, we know, that the want of a metrical system involves a serious injury to our foreign trade?—That I do know. I could not say how far it is an injury: I could say it is an inconvenience which many manufacturers and merchants have expressed to me.

2217. Of course, you are aware that other countries which formerly had complicated and difficult systems of weights and measures changed those systems for the metrical one, and have now adopted the metrical system?—I think, also, we must recognise that in many cases the change from a very bad system to another system than the metrical system would have been an improvement.

2218. Do you anticipate that there will be any more difficulty in England in making that change than there has been found to be in those countries?—I do not think I am prepared to go into

Sir *Edward Hill*—continued.

into that point. That would involve many considerations; considerations of expediency and policy, and questions of that kind which I am not prepared to discuss.

2219. So far as the metrical system is concerned, it is a system which meets with your approval?—I think it is one good system as far as it goes.

2220. And assuming it were desirable to change our system, would you be of opinion that it would be most advantageous to adopt such a system as is most in accordance with the rest of the civilised world?—No doubt, as far as we can.

Mr. *Jasper More.*

2221. Your department is not connected with weights and measures, but you speak as a statistician, I suppose?—I speak, not only as a statistician, but as acquainted with the Commercial Department as well as the Statistical Department.

Mr. *James Stevenson.*

2222. In the foreign trade, I presume you include America?—Yes.

2223. And, of course, America has the same imperial system of weights and measures which has been adopted wherever the English language has gone?—I think some part of the decimal system is used in the United States; how far it goes I cannot say. Of course, the money is on a decimal plan.

2224. Are you aware that in the statistics of trade in America they never speak of hundredweights, quarters, and stones, but only of pounds?—I do not think you can go quite so far as that. They have other things in the statistics; they have bushels, for instance.

2225. I am talking of weights, and not measures?—I think I have seen tons in the statistics, but I could not say exactly at this moment; for instance, in the shipping statistics it is always tons that you have.

2226. For shipping purposes, is not the English ton register of shipping universal all over the world?—It is very general; and I believe there is a common system of tonnage which is gradually getting into use throughout the world.

2227. Is the system of measurement enacted by law in each country so arranged as to bring out the tonnage of a ship exactly the same as if it had been an English ship measured at an English port?—I believe that is the intention; how far it is carried out may be a different question.

2228. Are there any civilised nations who have different shipping tons from the English?—I think, theoretically, there are none who have different, but I am not acquainted with the thing practically, because that is not in my

Mr. *James Stevenson*—continued.

department at the Board of Trade. But I believe at the time that the Suez Canal dues were arranged, for instance, there was a great deal of discussion as to what the exact measurement of ships ought to be; and I know that there are great difficulties in the matter.

2229. Is it not the case with regard to those valuable consular reports which come through the Foreign Office, that in every case the foreign statistics are translated into English weights and measures and money?—That is the general rule; and, of course, it is a great convenience; but I am bound to say, as a student of these matters, I should much prefer the original figures to be shown. We have tried to get over the difficulty in our Statistical Abstract for Foreign Countries, as I have told you, by putting in both the original and the translation, for the convenience of traders, in a great many tables.

Mr. *Godson.*

2230. We hear that the United States are considering the advisability of changing their system; supposing they were to come to the conclusion to adopt the metrical system, that would give you still more work to take their new statistics into our standard, and then work them across as you do now?—No doubt it would be so.

2231. So that every country that adopts the other system gives you more work, and, as you say, produces a less satisfactory result than you would have if you had the returns in the original form in which they arrived?—I think so; and it makes a real difficulty in studying the questions.

2232. Therefore I need hardly ask you whether it does not add to the cost of these returns, more or less?—No doubt. There is a good deal of labour, in connection with foreign tariffs especially, which would be quite unnecessary if we had the same system of weights and measures.

2233. And much more satisfactory?—And much more satisfactory too, because it is a great convenience for reference to have the original figure, and not a translation.

Sir *John Barran.*

2234. Would the metrical system, if adopted, facilitate the working of your office; would it really result in economical advantages if the metrical system were adopted instead of the imperial system?—I do not think you can attach much importance to any saving in my office in that manner, because the office is not a costly one altogether, looking at the general volume of our trade. It would result in a great increase of intelligence, and the facility of understanding things on the part of those who study these questions, and that, I consider, of far more importance than any saving of clerical labour.

## Mr. STEWART WALLACE, a Member of the House; Examined.

*Chairman.*

2235. I BELIEVE you are anxious to give the Committee, as a Member of it, some few statistics?—I will give you my own actual experience as to the difficulty of working in consequence

*Chairman*—continued.

of our weights and measures. I was a timber merchant. I retired from business some eight years ago. In the trade there were over 12 different methods of measuring the same piece of timber

*Chairman*—continued.

timber, with the result that disputes frequently arise between different parts of the country, between Ireland and Lancashire and Yorkshire, say, or between Lancashire and London. The timber is measured with the tape and with the string, and different parts of the country have different methods of folding the string in taking the gauge of the timber. In some places they will girth it in this way, and then measure the contents with only one fold. Then perhaps 20 miles off you will discover they will fold it so (*indicating*), the result being that it is a quarter of an inch less in the girth, and, of course, a difference in the cubical contents. You may charter a vessel between Dublin and London per ton; the captain signs his charter 40 feet in Dublin as a ton and in Dublin the tape measure prevails. Then you do not fold. It is a tape and you simply take the inches. Each time you fold practically you lose a quarter of an inch girth; whereas the tape, of course, having no fold, you simply say, supposing a girth is 48 inches, the quarter is 12, the square is 12 inches, whereas if you are taking the same 4 feet on the string and folding it you will probably be reduced to 11¼ or 11½ for your square, thus reducing, of course, the contents. The captain then, thinking that he has a charter of 40 feet tape measure, comes to London, and, of course, the custom of the port prevails, and he gets paid on 50 feet of tape measure. He thus loses 25 per cent. in the first measure, as he supposes, and he loses a further 15 per cent. on the tape being used instead of the string. I, myself, have had two law-suits on that point. I won them both, because the custom at the port of discharge prevailed, and the captain was beaten, of course.

2236. This is a difference in the method of measurements, and whether your tape is marked in metres or in inches or yards the same difficulty might arise?—Quite so.

2237. You have got to get rid of the method of measurement which you call the string measurement, have you not?—We want a universal system, so as to get rid of these local customs, and so as to have one mode of measurement.

2238. Your evidence shows, then, that these local measures, as we have heard before in weights especially, also apply in the timber trade, and that any legislation which should take place must point out not only the kind of measure which is to be used (whether it is to be a yard or a metre), but also how that measure is to be applied?—Quite so; that is to say, that it is to be tape measure, so that you will know if you buy or sell in any part of the world how the timber is going to be measured, that it will be simply by a tape, so that any man in Dublin can put the tape-line round the piece of timber and measure it, and it will be the same, no matter where it goes.

2239. That could be done even with the yard measure?—Yes. Now, I wish to go to the foreign trade. There is a special timber used in flax spinning, in which I did a large business in Belfast. Belgium is a large flax spinning centre, and I thought I would open up a trade there. I took samples with me, and I succeeded



*Chairman*—continued.

in obtaining orders for the timber. On shipping it there, of course, I knew there was a difference of measure, and I was shown in Belgium their mode of measuring. To me it was simple enough, and on my returning I showed my men who were to measure it how it was to be done, and how the calculations were to be made. Of course I did not do that part myself. On the timber being delivered in Belgium, a dispute arose with the three firms from whom I had orders because of the difference of the contents. Although measured in the same way, owing to the inexperience of my men, the contents did not come out in Belgium the same. I had to take a special journey and go over again, with the result that my matter was adjusted. My men, shall I say inattentive or careless, or shall I say that, it being a new mode of measuring, to take the metre instead of the foot, they probably did their best, but their best resulted in failure. The people there were extremely pleased with the timber. It gave the results I had told them it would give in the flax spinning; and I suggested to them that it would probably be better for me to show their men how to measure the timber on the English system, I to sell to them and quote in that way. They consented, and they gave me an order on those terms. With regard to the next consignment a discrepancy again arose, and, of course, I had to go over myself. I then found that their men were equally stupid with my own, and they had not comprehended our way of measuring by the foot. The difference then became so great that I declined to take orders on their measurements, and they declined to give orders on the English methods, although they were pleased with the timber and the results, and were most anxious to have it. But I could not subject myself to a dispute over every transaction, and the result was that I declined the business. A short time afterwards some flax spinners from Italy saw the timber in use and learnt from whence it had come and communicated with me with a view of getting some of the timber. I replied stating that I was obliged to them for their inquiry, but that my experience in Belgium did not tempt me to extend my foreign trade; that I could only consent to quote on condition that they would appoint someone in Liverpool to do the measuring in Liverpool; that I would take the risk as to the quality, but that I could not take the risk of the difference in quantity, as I feared that probably a dispute would arise. We corresponded a long while, and finally they found they could not get a representative with whom they were satisfied in Liverpool, to whom the measurement on their system could be left, with the result that the business fell through. On my retiring from business eight years ago, I gave it over to my nephew, who is a younger man, and three years ago he went to Belgium thinking he could succeed better than his uncle; that he would take more trouble. The result was he got landed exactly where I was, and he had to stop endeavouring to do business there. Now it will be within the recollection of the Committee that there was a great scarcity of hay at this time last year. We expected to have a famine,

*Chairman*—continued.

and I was in communication with a New York firm for a contract of 5,000 tons of Canadian hay. I had the whole matter practically arranged with the New York firm, with whom I was dealing by cable, but when we came to terms I carefully put the words "in English tons" in the last cable. I suspected there might possibly be a misunderstanding, and put that in. A cable came back saying, No, it was the American tons they were dealing for, and the result was again that the business entirely fell through, because of the differences between the English ton and the American ton.

2240. What is the amount of difference, do you remember?—There are 240 pounds more in the English ton than in the American ton. The American ton is 2,000 pounds; ours is 2,240 pounds. Now I do know of my own knowledge that many persons in London, not knowing the difference in the ton, made contracts for hay and got sold over it. The contracts were cancelled, and these persons had to pay considerable sums to be relieved of their contracts because of the difference. In the flax and linen yarn trades considerable difficulties arise because of the difference in the methods by which the flax is weighed in Belgium as compared with the way it is weighed in Belfast. There is always a slight difference for practical purposes, and the result is that there is sometimes unpleasantness. With regard to linen yarns the Belgium people have been obliged to give way and learn the system that prevails in Belfast, so that they put up their yarns in Belgium to suit the Belfast trade. If a universal system prevailed it would facilitate interchange very much.

2241. Have losses such as you have described in your own trade occurred in Belfast in that way?—I have not sufficient knowledge to know, because I am not really in that trade; but my brother is, or rather was; he has retired now; and I know from him that often difficulties did arise. Of course they would be adjusted between the firms, but still it created more or less friction at times, owing to the difference.

Mr. *Jasper More.*

2242. Which do you think is the more important consideration, the convenience of men in trades like yours, or the convenience of the less educated portion of the community in England?—I should say that as so many countries use the other system they are not interested in conforming to our method, but that we ought to conform our methods to theirs, and could do it in the interests of trade, and that it would be most desirable to do it. But I think the difficulty of teaching our men the newer system would be comparatively trifling, and they would very soon learn to accommodate themselves to the altered condition of things, which would tend to the establishment of trade.

2243. Do you think any party in the House of Commons would take the risk of the introduction of the question?—Speaking for one Member, I should have no hesitation in supporting it.

2244. From what you have seen of the House, do you think that either of the Leaders would

Mr. *Jasper More*—continued.

do it?—You are as competent to form an opinion upon that as I am.

2245. The facts stated in your evidence did not turn upon the question of weights and measures so much as on the particular mode of applying those measures. Now is it not perfectly conceivable that even if we had one system, as, for instance, a metrical system, such a difficulty might exist?—Never to the extent of requiring special journeys and quarrelling over the matter.

2246. I had reference to the case of timber, which you mentioned?—If it be done carefully you must arrive at one result. For instance, the same parcel of timber will be measured in England over and over again, giving the same results.

2247. I daresay you are aware that a similar state of things exists in many other trades besides those quoted?—I wished simply to give evidence as to facts within my own knowledge, and I know that foreign business was hampered because of the different methods in use.

Sir *Samuel Montagu.*

2248. Are you aware of many other persons who have suffered from the same inconvenience that you have suffered from?—I can hardly answer that, because I have kept my tongue quiet; I was not advising my neighbours. But my nephew tried the same thing.

2249. Do you know of numerous cases?—I think I was the only one who attempted to cultivate the foreign trade in the timber, which I was just now referring to.

Sir *Edward Hill.*

2250. As a gentleman who has been engaged in commercial transactions, do you consider our present system of weights and measures to be a hindrance to business?—I certainly do; I mean to the foreign more than to the home trade.

2251. But to the home trade also?—Yes; it is always a hindrance to my mind. The different methods of measuring to which I have referred, resulted in disputes where the captains did not know their business.

2252. Looking at the question generally, is it your opinion that it is undesirable and inconvenient to have a system of weights and measures which is incongruous in itself?—I think so strongly.

2253. Do you think that because there may possibly be some difficulty in making the change future generations ought to be still burdened with this bad and incongruous system?—The advantages are so great that, in my mind, in a year or two the present generation will be amply compensated for the little trouble it would incur in conforming to the new system.

2254. And your experience in dealing with your fellow-countrymen does not lead you to anticipate there will be any greater difficulty with them than has been found with peoples of other nations who have adopted the system?—Not at all when it becomes obligatory.

2255. And, given the desirability of making a change in our system, do you think it would be an advantage to adopt that system which obtains more largely amongst the foreign countries of the civilised world?—Oh, unquestionably.

2256. The

Mr. *James Stevenson.*

2256. The difficulty in the case you mentioned first seems to be not in regard to the standards, but as to the mode of using the tape line?—That was in regard to the home trade.

2257. Could Parliament interfere with any advantage to set that right?—Oh, certainly, because it should be declared that a "ton" means so many feet in the United Kingdom, not leaving every little locality to say whether it was 40 or 50 or 60 feet, so that persons going to the locality making a bargain where it was 40 feet would not find a difficulty if they were accustomed to take it at 50 feet.

2258. In the Act of Parliament is there not a definition of a ton of timber?—There is of a ton deadweight, but not of a cubical ton. It is all a question of customs as to the ton of measurement in the timber trade.

2259. Why has the timber trade all over the country suffered this extreme inconvenience all these years without any attempt to get it remedied by Parliament?—Because they have not had an opportunity of getting quit of it, as I am trying to do now. They have had to submit to the customs because the law did not interfere. Now we are anxious to get, if possible, a universal system that would be equally applicable to all parts of the country and to all countries with which we are to deal.

2260. It being so desirable to have a universal system, could not you apply to our existing weights and measures such a system of using the tape line as would not land you in these anomalies that you have mentioned?—I have explained that there are so many foreign countries who have already committed themselves to the other system that they are not likely to conform to ours, and on the whole it would be much less inconvenient for us to conform to theirs, and I say that in the interest of our trade it would be desirable for us to conform our custom and our weights and measures to theirs.

2261. That opens the general question that, for the sake of the foreign trade, which is nothing like so large as the home trade, we should alter all the language and usage of our home trade?—I wish to have legislation in regard to the home trade as well as the foreign.

2262. You would not begin with the home trade?—No, I should make the change once for all.

2263. Do you think you will ever get it at that rate?—I am here to give my opinion as a timber merchant, not as an expert in what Parliament may do.

2264. When there was a duty on the importation of timber, I presume that timber was then measured by Customs officers?—We had to accept whatever it was, and there was no appeal.

2265. Did difficulties arise at that time; was the same amount of timber measured in precisely the same way in each seaport?—Sometimes, then, it was sold by Customs measure, but more frequently not, because the Customs measured it in such a way as to get the most extreme contents that could possibly be given; whereas the merchant who wanted to buy from the importer wished it measured more fairly, so that he would get something approaching the actual contents.

Mr. *James Stevenson*—continued.

2266. The Customs officers were looking to the duty?—Quite so. They made it as much as possible.

2267. Did that secure at least uniformity?—Not at all, because they measured in a different way altogether. They used neither the tape nor the string; they used the caliper, a different method altogether.

2268. Has it yet to be ascertained in this country what is the most correct mode of measuring timber?—Every man has his own opinion. I always dealt with people whatever way they liked to deal with me, and took their money and gave them the best value I could. I never entered into abstract questions with the buyer.

2269. In the early time there was a double difficulty, not only the mode of measuring, but the standard of measuring?—Quite so. I have already answered one of the gentlemen on this side of the table that, given a parcel of timber here to a dozen men to measure, practically for all purposes the twelve would bring the contents at the same. I think you have not quite appreciated what I said on that point.

2270. But even these 12 men at different seaports would give different results?—The custom then comes in, not the method.

2271. Has there not been a movement among railways to weigh the timber instead of measuring it?—But then that becomes deadweight; 2,240 lbs. to the ton.

2272. That would get rid of all the difficulties?—For practical purposes now they carry by deadweight.

2273. That avoids all the difficulty of measurement?—Yes.

2274. Is not that a way out of the difficulty?—No, because the man to whom you are sending it will not buy it from you by weight. It comes to a question of measurement then.

2275. Now take the case of the hay, which I think you said was from Canada?—It was Canadian hay, shipped by a New York firm. At least it was a New York merchant selling to me.

2276. It was an oversight of the parties to the transaction in not making it clear how many pounds avoirdupois there were in the ton that you were speaking of?—That was his affair. I cabled asking a quotation for hay, and I looked round and found on the rough quotation given me there was a margin for me to look further into. I thought there was business to be done. Before closing I, having been to America and done a large trade there, knew that he might possibly be quoting me American tons, and I was paying c. i. f., London, so that I would be getting 2,240 from him in spite of himself. But it would have led to a lawsuit and trouble, and more a loss than a gain; so I put in "English tons," not being sure he would understand that when it got here it would be 2,240 lbs.

Sir *Edward Hill.*

2277. The weight of timber is no indication of the number of cubic feet, I presume, because of the difference of specific gravity?—To a man who understands his business it is roughly so.

Sir *Edward Hill*—continued.

2278. But it is affected by climate?—Quite so. It is not absolutely.

Mr. *Wrightson.*

2279. And very much by damp?—However dry, it contains 15 per cent. of moisture, and it hardly takes up more. Of course if it is put in the rain for a lengthened period it will absorb moisture; but for the purpose of business between the buyer and the seller there would not be much difference.

Mr. *Wrightson*—continued.

2280. Lying in a timber pond it might get waterlogged?—One does not buy it by weight under those circumstances.

Mr. ARTHUR TEMPEST POLLARD, called in; and Examined.

*Chairman.*

2281. You are the Head Master of the City of London School?—Yes.

2282. And you have paid some attention to the question of the teaching in your school, and other schools, of the present system of weights and measures, as against the metrical system?—Exactly.

2283. Will you give us your opinion as an expert on that subject?—I should not like to call myself an expert; I am not a mathematician. My training has been classical, but, as a head master, I have had a large experience in a big school of 700 boys, and I have also been able to take the opinions of my colleagues on the subject. The main point is, of course, that there would be an enormous saving of time if we were to have a decimal system throughout instead of the present system of weights and measures.

2284. Have you ever been able to come to any decision as to what the saving would amount to?—I have tried to calculate it, and taken the opinion of several of my colleagues. It is a little difficult, however, to do so. Perhaps I may just state the nature of the question first. First of all, there is the initial time taken up when the boy is learning the tables, and learning to apply them. We calculate that the mere doing of that takes the best part of a year. I mean an arithmetical year; I do not mean a whole year of the boy's schooltime.

2285. How many hours a week do you calculate?—Six hours a week, so that in 40 weeks there would be 240 hours altogether; an arithmetical year largely taken up in learning the tables, and the use of them. Afterwards, there would be, if we had a decimal system, a diminution in the time taken in doing every single sum throughout the whole course of arithmetic where reduction came in. Now, of course that is very difficult to estimate, because a boy gets reduction in some form or another right up to the time when he leaves school—if he does papering room sums, or similar examples, practice, and so on, he has the same kind of thing. So that it is very difficult to estimate it. Then another point would be this: The sums being shorter, there would not be the same chance of inaccuracy. One of my colleagues this morning was showing me that through reduction occurring in sums that had to be done the boys made mistakes, and their whole sums came out wrong, and it was mainly there where the mistakes were made. There would be an immense saving of time in regard to that. One cannot give exact numerical statements of hours saved, but I think there can be no doubt that by the introduction of decimal weights and measures a third of the time given to arithmetic, at least, would be saved. One of my colleagues this morning ventured to say he thought 50 per cent. of that would be saved, and he is a person who has given a great deal of time to the subject.

*Chairman*—continued.

2286. What do you consider the average length of a boy's schooling?—The elementary rules (the four simple rules, &c., which do not come into question) are learned before 10. Then the six years from 10 to 16 would, I think, be the length of a boy's schooling, for the purpose of arithmetic.

2287. Then in those six years how many days a week, or hours a week, are employed in arithmetic?—With boys from 10 to 12 years old, six hours a week.

2288. Two hundred and forty in each year?—Yes; that is for two years or 480 hours altogether for the two years. Then during the remaining four years we give less time to arithmetic. In the remaining four years we give five hours a week to mathematics altogether, a third of which time is given to arithmetic. Boys do not do very much arithmetic in the last year; so that supposing you reckoned the whole as three years, during which a third of the time is given to arithmetic, there is a year to be added to the two years between 10 and 12, three years in all.

2289. You actually save a year of schooltime?—Yes, of the time devoted to arithmetic.

2290. Some suggestion has been made that it is a very good thing for the boys to be hammered through this incongruous system of weights and measures; that it is a capital gymnastic exercise for them?—It is a good gymnastic exercise, but I contend there are a vast number of other things that have to be learned, and, if we can get the boys to take up those other things, they would be a better exercise. Take the important subject of science. Neither in chemistry nor physics can a boy get any distance at all unless he understands the metrical system, and the practical result is that the boy has to learn the old system and the new system also. The enormous saving of time there would be would in itself be a great advantage; but, also, he would be able to advance further and more rapidly in science and other things than he does. Surely that would be a much better training than the little bit of trickiness which he might acquire by learning the system of weights and measures.

2291. In fact, there is nothing in that suggestion?—I do not believe in it at all. Some people would give a modified assent to part of it,

*Chairman*—continued.

it, but I do not think anyone would hold it a sufficient argument against a change.

2292. So far as your school, and so far as the education of the young is concerned, would you be glad to see the metrical system introduced in lieu of this system which we have?—I should distinctly like to see it introduced.

2293. Do you teach in your school the metrical system?—Yes, we do, about half-way up the school, about half-way between the top and the bottom as near as may be.

2294. I suppose in your school, as in the elementary schools of the country, the boys begin with vulgar fractions before they are taught decimals?—Yes; we begin elementary vulgar fractions, and then the four rules of decimals, and then we come to the harder fractions and harder decimals. That is the way we actually do it. The common practice is to begin with the fractions before decimals.

2295. Why is it that in all the schools in England the more complicated system of the vulgar fraction has been taught to the children before the much simpler one of the decimal?—I imagine it is because fractions occur, farthings and halfpennies and three-farthings, in money, and the result is that people have gone on to treat vulgar fractions first.

2296. Do not you think that the vulgar fraction system being the older one, has been handed down to us from very old times, whereas the decimal system is comparatively new?—That is probably the origin of the practice; but the reason it has continued so long is, I take it, because fractions occur in connection with money and measures.

2297. You would like to see decimals taken at an early period?—Yes, certainly; after the first four simple rules.

2298. Why cannot you do so in your school?—We could do so, but we are in the hands of the examining bodies. The schools are not free agents at all. In most of our schools we depend either on the universities or certain examining bodies.

2299. Would you like to see a recommendation of this Committee that the Committee of Education, or the Vice President, should alter the code in such a way as to introduce the decimal fractions earlier?—Of course we have nothing to do with the code, but I should like to see it done.

2300. You would like to see that from the point of view of general education?—I should distinctly like to see it done.

2301. And that might assist you?—In secondary schools we should then at once follow suit. At present, a large number of boys leave the ordinary elementary schools and go to technical schools. Well, the moment they get to their technical school they have to learn a new system, and it is a great deal of trouble to them. A boy has to waste a quantity of time in getting facility in the use of decimals. Now all that would be saved if a decimal system were adopted.

Sir *Samuel Montagu.*

2302. Do I understand in regard to the alleged point of the mental gymnastics, you would prefer other subjects to exercise the brain rather than these complex tables?—I think, first of all, by saving time on these complex tables, you would be able to give very much more time to mental arithmetic, which is, I think, sadly neglected in our schools. If we were able to devote more time to mental arithmetic boys would be readier in their figures. It would help them in arithmetic and everything else. If it was found that a boy could not grasp such subjects as stocks and shares at an early stage other subjects might be introduced. They might begin algebra a little earlier or have more time to give to Euclid. I should not wish to see the time for mathematics reduced, but other mathematical subjects might be given in their place.

Sir *Samuel Montagu*—continued.

2303. Have you experience as to the tables learnt at school being generally forgotten?—To a very large extent. Every time there is an examination the boys have to look up their tables, and if a master tests his form suddenly on some back rule, about 40 per cent. bring their sums out correctly, perhaps not so many.

2304. In your experience, do those who have grown up forget their tables readily?—All tables except, perhaps, long measure, and one or two other simple ones.

2305. Have you had any acquaintance with the German method of teaching?—Not with the German in particular; I have with the metric system, but not as concerned with Germany in particular.

2306. Would a boy in Germany get more readily to the standards equivalent to ours being taught under the metrical and decimal system which prevails there?—I do not know it as a fact.

2307. You have not any knowledge as to that?—Not sufficient knowledge.

2308. Would it be possible to make a comparison as to whether boys at a certain age in Germany reach the same standard as in England?—It would be possible, but I have no means of giving information upon it.

2309. Would you regard English boys as more like German boys than other foreigners?—I should think so, yes.

2310. Have you any knowledge as to how long it took in Germany to make the change of system in weights and measures?—No, I have not.

2311. Have you any other point that you would like to address to the Committee?—There is just one other point about the waste of time, and that is the conversion from our present tables into the metrical system, and *vice versâ*, which takes so long. Now, of course, the moment you get familiar with a gramme or kilogramme you would think in kilogrammes, and you would never have to do any conversion. It would be only at the first stages where there would be any difficulty. Afterwards all that would disappear, and then you would only have multiplication and division and so on for ever.

2312. You consider there is a great waste of brain power?—Yes, and that the boys are not advancing. They might be getting up to trigonometry and mechanics, but they are hampered.

2313. Is that all you desire to place before the Committee?—I desire to state, as regards decimals, that boys really are very pleased to learn

Sir *Samuel Montagu*—continued.

learn decimals. There is a kind of impression that decimals are difficult, and that boys dislike them. Boys do not dislike decimals. What they dislike is the turning recurring decimals into fractions, and in the case of metres and yards turning one into the other. Those are things they do not like, but those are things which might disappear entirely. I have not found that boys dislike decimals, but that they take to them very kindly.

Sir *Edward Hill.*

2314. take it in your opinion, whatever may be the question as regards commerce, the present incongruous system is a stumbling block, and a nuisance, so far as education is concerned?—I consider it distinctly so.

2315. And it wastes time which, in your opinion, would be infinitely better employed on subjects of more importance to the after-life of the student?—To be sure.

2316. You have had a great deal to do with the rising generation of English boys, and have probably formed an opinion as to their capacity and intelligence as compared with others. Now, have you any reason to believe that the disturbance which would naturally take place by the introduction of a change in our weights and measures would be more severely felt in this country than it has been in others?—I do not think so. I think with a very little notice we could easily teach the boys and girls to educate their parents, and that the thing would be done without any trouble.

Mr. *Wrightson.*

2317. I should like to ask you whether it is not the fact that our notation is a decimal notation?—That is so.

2318. That we go by units, tens, hundreds, thousands?—Yes.

2319. Now, is it not a great advantage from the mental arithmetic point of view to be able to say that 5·278 millimetres is equivalent to 527·8 centimetres?—To be sure.

2320. And that it is equal to 52·78 decimetres?—Yes; you see it by inspection.

2321. And it is equal to 5,278 metres?—Yes.

2322. Now, is not that an obvious advantage?—I think it is a most obvious advantage.

2323. If you had the figure of 5.278 in inches, and you had to bring that into feet and yards, it would be very much more complicated, would it not?—It would be a question of dividing by 12 and 3, and so on; whereas in the other case, you see it at once the moment you have a decimal before you.

2324. You know that each figure after the decimal point represents something?—You can label it and name it.

2325. You can do in the one case without an operation what requires an operation in the other?—Exactly.

Mr. *Crombie.*

2326. You are of opinion that the children, if taught the decimal system, will be able to educate their parents?—I think they would do it very quickly; that, so far as it may be necessary, they would be able to explain any little difficulties that might arise.

Mr. *Crombie*—continued.

2327. Do you think that would apply among the poorer classes?—There is not very much calculation that the poorer classes do. A poor man goes and asks for his beer and there is a certain kind of measure which is given to him and he pays a certain sum for it, but he does not calculate the relations. There might be a little difficulty in adjusting the price to the measure, but that is a thing he would not have to do; that would be done by the retail dealer.

2328. I was referring to the case of the retail dealers and their customers?—Of course there would have to be a table drawn up for their benefit, but it would not be the poor man; it would be the person who had enough to maintain a shop who would perhaps have some little difficulty in the matter in accommodating himself to the change at first.

2329. You think, in fact, that the poor people would get educated in time to it also?—Yes.

Mr. *Jasper More.*

2330. Do you think it would be necessary to adopt the same nomenclature, or would it be possible to anglicise the names?—I think the metrical names are admirable. You see, when you have once learnt them, they apply to every single measure, and they are so very simple in themselves that it would be hardly worth while taking the trouble to do it.

2331. They are not simple to the uneducated classes, are they?—Look at the names you have already in our arithmetic; you have subtraction, multiplication, and so forth, and then you have avoirdupois weight and so on. Those things are not clear. I think these are really easy names and two of them are monosyllabic, and the multiples are the same in every single case, so that there would not be any great difficulty.

Mr. *James Stevenson.*

2332. Have not all our English standards the advantage of being monosyllabic?—They have, nearly every one of them; I think every one of them.

2333. With the further advantage of being good old Saxon. Now you mentioned the useless tables taught at schools, and you said that these tables were very soon forgotten?—Yes.

2334. If they are so soon forgotten why teach them at all?—Well, to begin with, of course the boys will want to apply them afterwards, and if, when they left school, they had to learn everything afresh, or begin to apply everything afresh, they might find it exceedingly difficult. They must be taken through a course of them.

2335. Can you give me a specimen of the kind of useless table you referred to?—I did not use the term "useless"; but suppose you take things like square measure or long measure, then you have got some nasty tables where you have got $5\frac{1}{2}$ yards, and then in square measure you have $30\frac{1}{4}$ yards. Now, those are most complicated things to work. The boys in after life have to do them, and it is as well that they should do them before they leave school.

2336. Are you not aware that in practical measurements, this $5\frac{1}{2}$ yards to a pole and the square of that, $30\frac{1}{4}$, are never used?—Well, yes.

2337. Why

Mr. *James Stevenson*—continued.

2337. Why should they be taught?—We find them in all the arithmetics.

2338. Precisely?—The arithmetic might be a little improved, but it would be far better to bring the whole system which is actually used in accord with that which is theoretically simple and easy.

2339. The system of 10 square chains in an acre, divided into 100 links, has been changed, and the land surveying is done in acres and decimals of acres; now, why not teach the boys in the schools the way which in actual land measurement is followed?—We do teach those things besides.

2340. Why teach the boys what is useless?—As a matter of fact, you have to know those names. You see them written down in that kind of way sometimes. The other day we were getting a cricket field, and there was a description of the field in poles. So that boys want to know what it means. Though that may not be the best way, you actually find it in use.

2341. Ordnance map areas are set out in acres and decimals of acres?—If we were consistently talking in decimals there would be no necessity for our teaching the other system. You asked why we taught that system; it is because it is partially in use.

2342. That remark would hardly apply to the practice of putting useless questions to boys which never occur in real life?—Such questions are set for gymnastic purposes. Ordinary fraction would co-exist side by side with decimals, a certain number of fractions would still be set partly as a preparation for algebra, and partly as a mental gymnastic.

2343. You have seen, perhaps, questions of given so many tons, cwts., quarters, lbs., ounces, drams at some extraordinary price per ton, what would that work out at?—I do not know that I have ever seen it in regard to coal; but such sums are set.

2344. Would it not be a very great improvement if questions which would really occur in future life were put rather than those which cannot possibly occur?—I do not know that you can always limit arithmetic in that way. There must be a certain amount of training got out of it. There is no reason why you should exclude everything of that sort.

2345. Do you teach the decimalisation of pounds, shillings, and pence?—We teach the method, but of course the boy always reckons in his own ordinary manner; and of course he does not take kindly to such decimals. He says: "What is the good of learning that, because it is obviously of no use?"

2346. Though he may not like it, would it not be an immense value and a step towards this decimal system which is so much in favour if the boys were thought in school to turn pounds, shillings, and pence into decimals of a pound?—I should think that it would be just as good to begin with the weights and measures, and then go on to the other, which is the course proposed by the Committee. Of course, as a matter of fact, if they do learn the other from their childhood, almost with their mother's milk, it would make it exceedingly easy for them; there would



Mr. *James Stevenson*—continued.

be nothing to learn in the metrical system except a few terms.

2347. You speak of the advantage of learning decimals at an early stage?—Yes.

2348. Surely the decimalisation of pounds, shillings, and pence would be a useful and easy thing?—I am not at all in favour of doctoring the present system. I want to see a radical change on uniform lines.

2349. Rather than decimalising existing units you would leave them alone and go in for a totally new system?—I should prefer to.

2350. In the meantime do you teach the basis of the Imperial system in your school; do you teach, for instance, how a pound-weight is derived?—No, we do not go into that, as a rule.

2351. That it is one-tenth part of a gallon of water?—No, we do not teach that, usually.

2352. Why not?—If a boy wants to learn it for some particular business afterwards he learns it, but it is not a thing we take into account. We do not take into account the relations of different measures and the transforming of one into the other and things of that kind.

2353. Do not you think that the boys ought to know the basis of the Imperial system of weights and measures?—It would be theoretically very nice. But it is rather a serious business; and then the figures are nasty and you forget them. It would be very convenient if we could have it on the other system. A litre is exactly a cubic decimètre, and so on. If boys were taught that, it would be an immense gain, because they would learn it at once.

2354. You do not teach your boys that a cubic foot of water is a thousand ounces?—We do not trouble about that. It is not customary in schools, except on science sides.

2355. Would it not be better to teach them something that would be practically useful afterwards?—I have gone through life without knowing it.

2356. You have not been a practical workman?—No; but then it would be only in certain lines that it would be wanted.

2357. Is it not your experience as regards decimals that one of the very great difficulties is the putting the decimal point in the right place?—That is the whole question. But the moment you give your mind to that I do not think there is any great chance of error. I think boys would very soon get familiar with it. Decimals are just the same as the first four rules excepting the decimal point, and boys would become familiar with it directly.

2358. We must not assume that all teaching of arithmetic involves the use of points. There must be many classes of questions, such as the working out of square roots, for instance, which do not involve that?—All that part remains, in fact, just as it was.

2359. And all these wonderful questions about a man being as good as so many women, and a woman being as good as so many boys, and if one man reaps a field in so many hours, how long would it take so many boys; all that class of questions are frequently put?—They are put for gymnastic purposes. Of course the moment

Mr. *James Stevenson*—continued.

you put two men together they begin to talk, and the result does not justify the calculation.

2360. Do you think a very great improvement might be made if useless questions were avoided?—I think such questions are really gymnastic, and do make people alert, but I think that the saving of time spent in reduction would be a real saving.

Mr. *Godson.*

2361. I suppose this system of transferring is what boys object to?—That is a thing which everybody hates.

2362. Did you ever do them yourself?—I have done them, but it is not a thing that I am at all ready at. Such things are very awkward.

2363. May I take it shortly, comparing the two systems, that with the metrical system the decimal point may be now and then in the wrong place, but that against that there are twenty

Mr. *Godson*—continued.

chances of error in the complicated processes of the present system?—Yes. Then, again, logarithms are much used by people who do practical calculations, and if a boy left school accustomed to use decimals it would be a very great convenience.

Sir *John Barran.*

2364. I suppose in addition to the time saved in learning the system there would be a great advantage in the general practice of the school in working out the different things which have to be worked out by students?—I think they would get more accurate, because they would not be troubled in the earlier stages by so many different rules. They would be all on one plan. They would get more accurate, therefore, and that would apply through the whole of their arithmetical course.

2365. And all their work would be much easier?—I think it would be much easier.

## Mr. MICHAEL CARTEIGHE, called; and Examined.

*Chairman.*

2366. YOU are the President of the Pharmaceutical Society?—Yes.

2367. And have, therefore, given considerable attention to the present law relating to weights and measures as it affects pharmacy?—I have.

2368. First of all, we have already had evidence from two competent witnesses on much the same subject as that which you propose to give evidence upon. Although you have not had the opportunity of hearing that evidence, perhaps you will confine your remarks to the special question of how far the present system of weights and measures as used in pharmacy is objectionable, and how far it would be desirable to adopt for your trade purposes the metrical system which is now employed throughout almost all civilised countries. Could you tell us your opinion on that subject?—In the first place, the practice of pharmacy is becoming more and more a practice involving the use of very potent and active ingredients as compared with what it was in bygone days. The rule of thumb in pharmacy, in fact, has gone. Those who prescribe medicine, either believe in it *strictissime*, or they do not; and potent alkaloids are very largely used, not only in this country, but all over the world. Now Great Britain is a place, which I am happy to say, is visited by a great many foreigners. Many American friends come from the United States and South America, and in practice in every large town in this country, we are constantly asked to dispense and sell preparations described in those foreign pharmacopœias where the metrical system of weights is in vogue. As I understand, the present law we are doing an unlawful thing when we have exposed metrical weights. I am afraid we are doing it, however, and therefore we are breaking the law.

2369. We heard in one case of an inspector coming in and pointing out that some person had got a kilogramme weight, and saying that he must withdraw that?—Quite so.

*Chairman*—continued.

2370. Has that ever occurred within your knowledge?—It has not occurred to me, but it might occur any day, because the Act only allows the use of those weights in the laboratory and for comparing or checking the weights of imported goods.

2371. Then it would be a great convenience to you if the metrical system of weights and measures were legalised for use in trade?—In our pharmaceutical trades. I say nothing about other trades.

2372. You would not deny it to other trades?—Not at all, but I mean to say whether we have the law or not, I am afraid we should in practice have to break the law. These cases are getting so numerous. The metrical system in regard to medicines is becoming so general that it would be impracticable to carry on the business of a pharmacy, whatever the law is, without using metrical weights. It is needless to say we would prefer to be able lawfully to use these weights in our respective pharmacies. Then there is a much more important matter with regard to the preparation of medicines at home. There is, as you know, sir, a standard book in all countries, a compendium, called a pharmacopœia, and in all the world, including Russia and the United States, the system of weights and measures mentioned in such pharmacopœias is solely the metrical system of weights and measures. You, sir, know perfectly well, as well as many of your colleagues, the facilities that that system gives to the making of preparations of standard strengths, that is to say, the simple relation of weight to volume is a thing of supreme importance in preparing preparations of potent drugs. But hitherto the system of weights and measures in the British Pharmacopœia has been the British system, the legal system, with occasional departures from it in regard to tests which were allowed to be used alternatively on the metrical system. Now

*Chairman*—continued.

Now, in view of the use throughout such a large part of the world of this system in the compilation of pharmacopœias, it is more than probable that if the Legislature gave authority that those weights could be used in pharmacy, the metrical system would be introduced into the British "Pharmacopœia." In fact it has been decided by the General Medical Council (which is the body responsible for the production of that book) to have a new British "Pharmacopœia." It has also been resolved that this "Pharmacopœia" shall be made a standard all over the English-speaking countries, in Canada and the States, and Australasia, so as to have one uniform standard throughout the whole of the English-speaking world.

2373. And that is to be on the metrical system?—And it is thought by some that if that is to come about the metrical system must be introduced.

2374. But that is not decided yet?—It is not decided, nor could the Medical Council introduce that system unless it becomes a lawful system.

2375. Supposing that Parliament should legalise the metrical system, is it, in your opinion, that at once the "Pharmacopœia" would contain the metrical weights perhaps side by side with and in addition to the others?—I think it is almost certain, side by side with the others, yes.

2376. And by degrees the one would be found, in your opinion, so much more convenient than the other that it would gradually come into general use?—And replace it entirely as it has done in the United States. Eleven years ago the two systems were introduced, but the "Pharmacopœia," published a year ago, has only the metrical weights.

2377. How long did that dual system exist in the United States?—10 years.

2378. And now the metrical system has been made compulsory?—And now it has been made compulsory.

2379. Do you think it would be possible to make it compulsory at once in England for pharmacy?—No, I am afraid not, because, apart from the preparation and the use of weights for preparing medicines, there is the important point of prescribing them, and of giving a dose. In what I have said I make no reference to dose. The "Pharmacopœia" does not seriously consider doses. The important part is the making, by weights and measures, of the various preparations, of which the doses may be either in the metrical or in the English system.

2380. Can you tell us how often they publish the "Pharmacopœia" in America?—There is a decennial revision once in 10 years.

2381. Therefore it did not take 10 years for the change to come about?—It did not take 10 years.

2382. And there is no reason why we should not follow their example?—There is no reason whatever. I know that in the States the medical man is now in the habit of utilising the powers there are, and of writing prescriptions in the metrical system of weights and measures, and educated people in the States take medicine in



*Chairman*—continued.

that way. I mean to say they understand perfectly what such measures mean.

2383. You come here, I understand, expressing your own opinion, but also representing the Council of the Society of which you are president?—Quite so.

2384. And that Society does include a large proportion of all the pharmaceutical chemists in the country?—Yes.

2385. And it is increasing in importance every year?—Yes.

2386. You told us about the "Pharmacopœia" and about your opinion in that matter; now, of course, the question of buying drugs on a large scale will have come before you, and we shall be glad to have your opinion as to how far the introduction of the metrical system would facilitate commerce between countries using these weights and ourselves?—The adoption would facilitate it very much. The city of London is the great emporium of all drugs, whether of value or valueless. I mean to say that everything that is found abroad is sent to London to find a market, and having got there, the preparations of that drug that can be usefully made into medicines are made, and would be made on a much more extensive scale, and exported to other countries where there is no recognised pharmacopœia, if the metrical system of weights and measures were permissible.

2387. At present the difficulty is that those weights have to be converted, causing trouble and some degree of loss?—Quite so, and loss of business. South Americans go to Paris instead.

2388. Why do they do that?—Because their indents are filled in Paris as they are written; that is to say in kilos, and so on.

2389. Whereas that is not the case in England?—In fact it is not legal. In England it is stated not to be legal to put outside the package of a case for export "kilos"; you must, I believe, put the weight in lbs.

2390. I think you said that you feel strongly the necessity of there being a simple ratio between volume and weight of liquids in preparing medicinal preparations?—Quite so.

2391-2. At present the relation is not a simple one?—No. Then it must be borne in mind that although the value of the things that are used in medicine and in pharmacy are not always intrinsically great, the safety of the public has to be considered in these matters, and it is in regard to that, as well the others, that I appear before you. There is great importance in having strengths that can be easily worked, and which would be the same for every potent preparation, whether the prescriptions were dispensed or the articles sold in London or in New York, in Berlin or in Paris.

2393. You think, therefore, that both as regards the physician or medical man who prescribes, and as regards the chemist who makes up the prescription, the adoption of the metrical as against the present system would probably avoid many errors and dangers to which we are

*Chairman*—continued.

at present subject?—Quite so; I speak now exclusively in regard to preparation. In regard to prescribing, there is no doubt, as in the case of teaching, it would take some years before the prescribers of the present generation got accustomed to the new system.

2394. But if they did become, and when they did become accustomed to it, do you think what I have said would be the case, that it would limit the risk?—Yes, distinctly, and simplify matters very much, and prevent mistakes of all kinds.

Sir *Samuel Montagu.*

2395. Suppose the Government were to make the metrical system legal in your particular trade without making it compulsory, would the great majority of those in your trade adopt it voluntarily?—For the preparation of things, certainly.

2396. Therefore I may take it that if the Government were reluctant to make the metrical system compulsory, you would take the initiative amongst yourselves and decide to adopt it if you were allowed to do so?—Precisely, that is what we should like; to have the power of using it alternatively.

2397. Therefore the making it compulsory would make no difference, because you would enforce it in your own trade voluntarily?—Precisely.

Sir *Edward Hill.*

2398. I understood you to say that the introduction of the metrical system would tend to greater accuracy in the preparation of drugs, and also in their prescribing, and to that extent the safety of the public would be increased?—Precisely.

2399. In regard to the mercantile point of view I understand the trade is now being diverted from London in consequence of our not having the metrical system of weights?—Yes, the wholesale and export trade.

Mr. *Wrightson.*

2400. Supposing a foreign physician were to give a prescription to a patient who came to England, could that prescription be readily translated into the English system without danger?—In many cases not without considerable danger.

2401. Danger to the life of the patient?—Danger to the life of the patient.

Mr. *Jasper More.*

2402. Do you think it desirable to have the metrical system at once added to the systems that are legal at present, without attempting to make it universal?—Certainly; we consider that ought to be done at once.

2403. Do you think it is better for this Committee to recommend that, than attempt to make it universal?—I think so. I should be disposed to recommend the Committee to do that. There must be many cases where the power to use would be, as in ours, of considerable effect.

Mr. *James Stevenson.*

2404. I think we were told by a previous witness that there is a large business now carried on in making out drugs in medical packages for foreign countries?—No doubt there is a large trade done; but the phrase "medical package" does not convey any meaning to me, because I am told, on the best authority, that when you send a package out you must put your weights or dimensions in the British standard.

2405. There is no law to that effect?—I do not know about law. I believe the Customs would not allow things to go without. I am not sure about the law.

2406. We know that foreign countries would not receive them unless the invoices and marks on the packages are in the metrical language?—In a case that occurred in the City I understand it was held that cases must not go through the Customs except in the form of pounds.

2407. You mean the English Customs?—English Customs in going out.

2408. Can you give us the case which decided that?—I do not say it was decided as a point of law; but the Customs refused to pass. That is a statement made, but I do not know it of my own knowledge.

2409. Do you think you can trace the date of that transaction?—I think Mr. Umney, your former witness, would be able to do that.

Mr. *Godson.*

2410. Do you know of your own knowledge that there is an immense difficulty in getting English prescriptions made up abroad?—I do.

2411. And if there were the same system there would be no difficulty whatever?—No difficulty.

2412. Where care is used there should be no possibility of mistake?—I think not.

2413. And the fact that the system is alike here and abroad would almost annihilate the chance of a mistake except by a clumsy person?—Yes; and there is this additional difficulty which has occurred in recent years, that in several foreign countries an Englishman cannot have his bottle of medicine delivered. It is stopped at the Customs. Then he must have it made up there, and if a potent preparation is of a different strength, although of the same name, there is a great risk.

*Chairman.*

2414. If we had a pharmacopœia made up in both English and French and in the metrical system, the prescriber might write down in both ways, so that then the foreign chemist would be able to give the amount which he is accustomed to give and see the number and the weight that he is accustomed to?—Precisely so.

2415. But until a metrical system is adopted it is not possible to do so?—No, there have been attempts. One of the greatest *desiderata*, in regard to the safety of the public of the present day, is an international standard, or pharmacopœia, of the more potent preparations. I have myself assisted at Congresses, both on the other side of the Atlantic and in various parts of Europe, and we have been always met with this difficulty of weights and measures.

*Chairman*—continued.

2416. It would have been done if we had already adopted this system?—I have no doubt of it. Foreigners feel frightened at having to tackle our system and to assimulate it to theirs with regard to these potent preparations.

Mr. *Godson.*

2417. Do you know instances where foreign chemists have actually refused to make up English prescriptions?—I do.

2418. And have insisted on the person going to a foreign doctor to get it in their weights and measures?—I have known such cases.

*Chairman.*

2419. Does any other remark occur to you?—I do not think so, except to emphasise the fact that if it would take 10 years or 20 years to get the metrical system compulsorily adopted throughout the whole of British trade and commerce. I think it would be a desirable thing with regard to pharmacy that there should be a power of using as an alternative system in medicines, the metrical system.

2420. And that, you think, might be done at once?—At once; because you give us two apothecary weights already. We have two ounces; we have two drachms, one half the weight of the other.

Mr. *Jasper More.*

2421. It would not be beneficial in pharmacy alone, but you would admit for other people?—I would admit it for everything; but I am speaking from the point of view of the pharmaceutical chemist.

*Chairman.*

2422. If the metrical system can be adopted all round you do not object?—No. It approaches more to a scientific character, and, of course, that system lends itself very especially to this particular trade.

2423. In scientific researches and all scientific experiments as you are well aware the metrical system is used?—It is the only one that is used.

Mr. *Webster.*

2424. I think you mentioned there is a trade to France in South American drugs?—A trade from France.

2425. Is it a large trade?—Yes; it is a large trade to Rio and other places in Brazil from France.

2426. And we have lost a great part of that trade?—We lost some of it, I will not say the great part of it. I have not looked into the statistics, but I know that some has been lost, personally.

2427. Have we lost trade owing to our present system of weights and measures with any part of the world besides South America?—Yes, I think with the United States, although they have not adopted the metrical system entirely.

Sir *John Barran.*

2428. May I ask you whether the trade between France and South America is not to some extent influenced by the fact that the French language is the prevailing language of that country?—In regard to drugs pure and simple. With regard to various other articles used which form part of what in South America is called a drug store, there is no doubt the genius of the country tends to go for the French style of thing. I do not think it is so much the language; because, the feeling abroad is that the purest drugs of the world are to be found only in one place, that is, in London.

Mr. *Webster.*

2429. Is not the language used in South America, Spanish and Portuguese?—Yes.

Sir *John Barran.*

2430. Is not their correspondence carried on in French?—Partly in French; but as a rule in Portuguese and Spanish. There is one other reason that gives the French a little advantage, and that is that the French Pharmacopœia was for years the only pharmacopœia used in Spain and Portugal. Therefore the Spaniards and Portuguese who went over there naturally followed it and have the preparations that were in use in France.

2431. But is it not the fact that the tendency of South America has been to trade very largely with France?—It is so.

2432. Therefore that will to some extent account for the drug trade being done pretty largely through France?—I am not prepared to admit that as regards the drugs pure and simple, I can assure you, sir, without going into statistics, that the largest quantity of the most expensive and most important drugs, those that have to be sold by standard like opium are sought after in London. I have reason to say, and I can produce statistics to show, that the cream of that particular class of business has always been brought to London where practicable. But when it extends to preparations of them—the using *menstrua* of various kind to exhaust them—to make them into preparations, then they want those sold to them in kilogrammes, or 100 kilogrammes, as the case may be, in certain convenient packages, and they want them exported in that way, and they want no friction put in their way.

Mr. *Webster.*

2433. Is not the bulk of the trade with South America either from England, Germany, or the United States, and not from France?—In this class of commodities, principally from the United States.

2434. But I am talking of the general trade?—Yes, the general trade that is certainly so.

2435. Is it not the fact that the majority of South Americans who can speak a second language, speak English and cannot speak French?—That is so.

*Tuesday*, 28*th May* 1895.

MEMBERS PRESENT:

Sir John Barran.
Mr. Burt.
Mr. Alban Gibbs.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Mr. Jasper More.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Webster.
Mr. Wrightson.

SIR HENRY ROSCOE IN THE CHAIR.

Sir FREDERICK JOSEPH BRAMWELL, Bart., F.R.S., called in; and Examined.

*Chairman.*

2436. I DO not think any introduction to the Committee is necessary on your part, or, rather, on my part?—Well, I do not know how far the Committee may or may not know my qualifications, or supposed qualifications, for being here upon this subject.

2437. If you desire it, perhaps you will state them?—I may say that, for the last quarter of a century I think, I have particularly considered this subject of the relative merits of the metric system and of the English Imperial system of weights and measures, and I have had opportunities of seeing the metric system in practice rather intimately; that is to say, for two years in succession I was called out to Egypt by the late Khedive in reference to the sugar factories there, the greater part of which had been erected by French engineers. I came into frequent intercourse with them in the progress of those investigations, and we very often had to calculate together, and I was struck with the want of facility with which their calculations were done.

2438. Was that altogether dependent upon the difference between your system and their system, or was there not, perhaps, some personal equation in the matter?—Of course I know it is open to that observation; but I should like to go on to say that when they expressed their surprise at the comparative ease with which I appeared to do it, I told them that what I had done was this: I had turned their metric system into the corresponding English system; I turned their decimals into vulgar fractions. I worked out in this old-fashioned way the problem whatever it was, and having got the result I turned it back again into their particular kind of system.

2439. And they of course were quite unable to follow you in that case?—They were out of the habit entirely. Then I may say that probably about 21 years ago, I think it was at the Bradford meeting of the British Association, Sir John Hawkshaw, myself, the late Professor C. A. Merrifield, and three or four others, were appointed a committee of the British

*Chairman*—continued.

Association for the preservation of English weights and measures. We got ourselves so appointed because there was a committee existing for the introduction of the metric system. We never reported—we never had anything to report; but we caused ourselves to be re-appointed year by year until we found that the other committee had, if you will pardon the expression, "fizzled out"; and then we dissolved ourselves, because there was nothing more to do.

2440. Does that, in your opinion, prove that the metric system, or our system, is so much better than the other?—I am only at present trying to show you why I am here; that I have not come here as simply thinking of the subject for the first time, but that it has been a subject of thought for a good many years. Then, again, whenever I have travelled on the continent, as I used to do, but cannot do now, I have noticed there the effect of the decimal system upon persons engaged in business. I will ask any of you, who have observed, whether you can ever go to a railway station and ask the man, or more commonly the woman, with a man to take care of her, behind the grating for three tickets from A. to B., and get an answer, without that person having to calculate, with a piece of chalk, or a pencil and paper. I put that forward as showing that, to my mind, the metric system is absolutely inconsistent with mental arithmetic, and I prize mental arithmetic very much.

2441. Do you know whether in the French schools they occupy the children with what we call mental arithmetic?—I do not know at all whether they do; but I feel prepared to say that if they do the result is not satisfactory, judging by those whom one meets with.

2442. Is it that the system which many people consider a much simpler one than ours does not lend itself to these mental gymnastics because it is so simple, or in what way do you account for the fact?—I object to the system having allocated to it the term simple, because, to my mind, it is not simple; to my mind, the simple system is the

*Chairman*—continued.

the one involving the fewest figures and the fewest liabilities to mistake. I say that the metric system, as compared with the duodecimal, with our own system, involves more figures, and much more chance of mistake.

2443. But with regard to this question of mental arithmetic, why, in your opinion, does not the metric system lend itself to mental arithmetic?—Because of its multiplicity of figures. Let me put this to you as an illustration: Supposing I was to ask any gentleman round the table to square 4·25 mentally, I suppose there are very few here who could do it with ease or great comfort. Supposing I ask you to square $4\frac{1}{4}$, you would do it in a moment. You get $18\frac{1}{16}$. I suggest that squaring 4·25 in your head is rather a trying operation. If you want the result in decimals, instead of calling it $18\frac{1}{16}$, you could, if you please, call it 18·0625.

2444. Will you kindly continue your observations?—I understand that whatever the terms of Reference to your Committee may be, in effect you are here considering whether the metric system should not be substituted for the Imperial system.

2445. Not quite; the words of the Reference are, "To inquire whether any, and what, changes in the system of weights and measures should be adopted"?—That I saw. I saw that it was wider than I stated; but I suppose that no sane person, whatever his views may be, would think that it would be wise that you should spend your time in inventing a new system of weights and measures; which was neither metric, nor Imperial.

2446. But we have had evidence brought before us that the advantages (which I presume you do not) of the decimal system are, that it might be possible to decimalise the pound, for example, and adopt that system, which would not be, of course, the metric system?—Quite so; that has been suggested, of course, for very many years; but I imagine that the really substantial question is the adoption of one or the other, and I gather from the evidence that has been given before you that it is considered advisable that the French metric system should be adopted, because it would enable merchants and manufacturers in England to deal more readily with the Continent.

2447. That is one reason?—And the other is that the adoption of the system would simplify calculations. I think those are the two main reasons that have been given to you for the proposed change. Now, giving full value to the first of those grounds; that is, making commerce more easy for the English merchants and manufacturers, I do not see that the suggested substitution of the metric system throughout the United Kingdom is needed to attain the desired end, and I will point out why, if you please. As regards the second ground, that of facility and accuracy of calculation, I am prepared to dispute that on both points; I say that it is neither more easy nor more accurate.

2448. With regard to the question of the adoption of this metric system by foreign countries and the disadvantage which we are told English merchants and manufacturers feel in

*Chairman*—continued.

dealing with foreign countries, because we have a system different from theirs, what have you to say?—I have to say that, according to my lights, that is a disadvantage which is not caused by the fact that the metric system is not in obligatory use throughout the United Kingdom, because any person who wishes to deal with a customer using the metric system is, as I understand, at perfect liberty to make his contract in the metric system, and he is at perfect liberty to convert the English weights and measures into the metric system. And if it be of value (as it is stated it may be), for the purpose of facilitating commerce, the question arises, Why do they not do it; and why are nine people to be put to the inconvenience of using the metric system for their daily purposes because the tenth man will not do that which he is at perfect liberty to do, and so get rid of the objection so far as he is concerned?

2449. We have been told by a great many witnesses that they are in the habit of converting, and are obliged to convert, as you have just said, the English weights and measures into the metric system, and *vice versâ;* but they complain that in that way they are handicapped, because they are put to extra expense which other traders, who use the metric system and who trade with the same countries, are not put to, and that in that way the trade of the country is very considerably handicapped; and we have had strong evidence from a great many people trading with foreign countries that that is a matter which they feel very keenly?—But I am incapable of following the reasoning, because they are allowed to use metric weights and measures in all their manufactures.

2450. No, that is just what they are not allowed to do?—I thought they were allowed to do so in everything except retail trade.

2451. No; we were told the other day that if an inspector came into a shop and saw lying on the counter a kilogramme weight he would say, "You must not use that; that is an illegal weight, and you have no business to use it"?—If you will pardon me, I said except for retail trade.

2452. But we were told that they must not use it for wholesale trade or trade of any kind?—It is not for me to interpret Acts of Parliament, but I thought that they certainly were allowed in a manufactory to employ the metre and the kilogramme for manufacturing purposes.

2453. No, they are not allowed to use it "for the purposes of trade;" those are the words of the Act?—Yes, but they are allowed to use it for the purposes of manufacture.

2454. No, they may not employ the kilogramme weight or metre in any way whatever?—Not in a manufactory?

2455. No?—Then I have very much misread Mr. Chaney's evidence.

2456. The fact is, that the law is somewhat difficult to interpret in that view; for scientific purposes and for purpose of manufacture it is stated; but what that means it is difficult to say; because when you come to use the weight actually for dealing with people you are prevented from doing so?—Then let me say at once that I, for one, should be quite prepared to view

*Chairman*—continued.

with approbation a change in the law which would make it legal for anybody for the purposes of his business to use those weights indifferently with others, but not to the exclusion of others.

2457. You would like to place the two on an equal footing, to make the use of the metric system of weights and measures legal?—Yes.

2458. For trade and retail dealing?—I say for all purposes; but not in substitution; I would only put them on an equal footing.

Sir *Samuel Montagu.*

2459. You would make it permissive?—Yes, I suppose if there are two things, and you may use either, both would be permissive.

*Chairman.*

2460. I have endeavoured to put before you some of the evidence that we have had as to the hardships which foreign traders feel, as stated to us, in not being allowed to use the metric system, and I understand that you concede the matter so far that you think it might be well if they had the opportunity of employing these weights and measures when they required them?—Yes, I can see no objection to that; and it seems to me that if that were done, it at once gets rid of all suggested difficulty with the one exception of coinage. That is not remitted to you, as I gather, nor is it contemplated to change pounds, shillings, and pence into francs and centimes; but until you do that the difficulty appears to me in large measure to remain. However, that is not before you; otherwise I cannot see any objection to the two working together; and if they did work together it appears to me then that that ground of complaint ought to be entirely done away with.

2461. But, as I understand, you do not think the system is a simple one; you do not think that if it were to be adopted in England as a compulsory system, the people would gradually, or very shortly, see the advantages which they would gain?—No. I am rather going from that which I had sketched out, or rather I am taken away from it, but I should like upon that point to refer to the experience in France.

2462. If you will be so good?—The metric system was proposed in 1795, I think; made obligatory till 1800, when the coercion was felt to be too intolerable, and it was not then made obligatory again till 1840; showing, therefore, the great difficulty of introducing a new system. Napoleon was supposed to be a man of good sense in a variety of ways; I wish I might bring before you an extract from Montholon's book of "Napoleon at St. Helena."

2463. Will you put it in or read it?—I will not read the French, for my accent is too detestable, but I will put it in; I may, I should like to, give a few extracts from the translation.

2464. Will you tell us the upshot of Napoleon's opinion on the matter?—I could not do that without doing injustice to Napoleon. However, I will try. He says that all that was wanted was to have the weights and measures of Paris made universal throughout France. Instead of doing that, which might have been done on one sheet of paper, and in one year, the geometricians and algebraists got hold of it, and nothing would please them but the astounding folly of endeavouring to make a new unit; a unit of the ten-millionth part of a quadrant, and that they proposed this because they thought, that if they provided a new unit of that kind it might become international.

*Chairman*—continued.

2465. As it has, in fact, become?—He goes on to say, "never considering that the English never would adopt it nor the Germans (who no doubt have now), and that the mind revolts at a certain unit uprising in tens, and lowering down by tens, that it conveys no idea to the mind." He is absolutely opposed to it; the mind understands a line, an inch, a toise, a league, it follows that; it does not follow a row of figures with a lot of noughts after them, and it is absolutely contrary to human understanding.

2466. I suppose Napoleon had 10 fingers?—Yes; and if he had 12 we should be out of all our difficulties no doubt. Then he says that the experience of centuries proves the difficulty of dividing a space or a weight above 12 to be so great that when you get to 12 you take a new step, a new platform to start from. If one-twelfth of an inch were wanted the calculation was ready made, it was the collective number called linge. And then he goes on to say that if it be desired to express the hundredth part of a linge we must have recourse to its relation to the metre, involving an infinite calculation. I may put it in and leave it with you there. Then I think I am right in saying that there have been given before the Committee evidence which I see on very many occasions related to the diversity of weights and measures locally; and it is suggested that the adoption of the metric system would put a stop to such diversity. To my mind the evidence relating to the use of local weights and measures is only valuable in this inquiry in so far as it shows the enormous difficulty of substituting anything new. It is many years since the Imperial weights and measures were settled, and yet although it appears from Mr. Chaney's evidence that their use is decreasing, nevertheless these local weights and measures remain; and I suggest to you that if the metric system were imposed upon us to the exclusion of our system, nothing short of coercive measures will suffice, such as one finds in one of these Acts, where, as I read, the clerk of the market if he make a return in anything except the legalised system is to be fined so much, and every newspaper that publishes it is to be fined 10*s.* an impression, and thus a paper selling 200,000 copies might find itself badly off one morning. I think nothing short of coercive laws like those of which Napoleon also talks of would cause the metric system to be taken up.

2467. You mentioned just now that the Germans have taken it up, although Napoleon said they never would. Have you heard of any difficulty in Germany in regard to this system?—No; I have no personal knowledge of that at all, beyond reading the evidence that has been given before you.

2468. But still that shows, does it not, that it has been adopted, and did not create any very great disturbance, and that, so far as we can gather, the result is quite satisfactory to the German people?—That appears to be so on the evidence that you have had before you.

2469. And

*Chairman*—continued.

2469. And you have no evidence to put against it?—I have no knowledge of the subject in Germany.

2470. And not only in Germany, but 1,470,000 people are now using it; does that impress your mind as being of some value?—Certainly.

2471. That the mass of the civilised world has now adopted this system?—I think you are putting it rather high there.

2472. I say 1,400,000 persons?—I do not know what the total civilised population may be. I may put it to you that it was tried in the United States some years ago (I looked into this matter very much with Mr. Coleman Sellars, whom I may call the Whitworth of the United States); they tried it, and had to abandon it. I see from the evidence before you that they are again about to make a try.

2473. Not only that, but we have had before us that they have already adopted it, and now it is law in all pharmaceutical preparations, the weights and measures used in the whole pharmacy throughout the whole of the United States is now the metric system?—I hope I shall not be taken ill, then, and have any prescriptions made up there, as the probability is that I shall be poisoned.

2474. But you see they are taking a step towards this thing in one particular direction, at all events?—It is the thin end of the wedge. You do not appear to care very much for Napoleon; but may I refer you to a speech which was made by Mr. Beresford Hope in the House of Commons in 1868?

2475. If you please?—It is too long to read.

2476. Will you give the date, please, so that we can refer to it in "Hansard"?—It is in "Hansard," 13th May 1868. May I also refer you to a letter written to him by Sir John Herschel; I will only read a few lines of it. He says, "Pray pardon me for calling your attention to this Bill of Messrs. Ewart & Co., in the hope that you will oppose it, at all events by vote, and perhaps by word. It is most uncalled for and violent, and is supported, I believe, mainly by the chemists among men of science, whose reading and experimental practice bring them frequently into contact with the French weights and measures, and such engineers as have foreign contracts to execute," and more of that kind. But you really should read Mr. Beresford Hope himself: "Only imagine an honest housewife going into a shop and asking for a decigram of pepper, and a dekagram of tea; imagine, too, the milkmaid selling her fluid by the litre. The Member for Liverpool is a kind-hearted man; he is then prepared, with all the stringent force of a penal statute, to enact that when one of his youthful constituents may desire to effect a commercial transaction in a manufacture for which one portion of that great borough is famous, he should be bound to go to the shop and tender his 'dime' for three decigrams of Everton toffee," and so on.

2477. No doubt that is very amusing?—And there is a great deal of truth in it.

2478. But do you think that it is more impossible for a woman to go into a shop and ask for a kilogramme of sugar, than to ask for a thermometer or a barometer?—I should have thought so. I mean that those are two different things, like a frying-pan and a saucepan; but this is a measure of quantity with which she will be unacquainted, and she will not know whether she is going to get something that will want a wheelbarrow to take it away, or something that she can wrap up in paper.

*Chairman*—continued.

2479. We were told by a gentleman the other day, a Mr. Pilter, a gentleman who knows his Paris, that he has possessions in Tunis, and that the French have lately introduced the metric system into Tunis, and that the negroes as well as the Arabs in Tunis are now fully up in the subject of commerce; they market and do their business in kilogrammes and metres, and he seems to think that on the whole we could not place, even the market-woman or boy who goes in to buy a pennyworth of toffee, on a much lower footing necessarily than the negroes or Arabs of Tunis; would you agree with that view?—It depends a great deal upon what the negroes and Arabs have to unlearn. We have the other thing ingrained in us. It is no good to complain of the metric system because it is as it is; but I hardly need to point out that the French do not use it as the originators of it intended. For example, instead of writing down a nought, and a point after the nought, and then two other noughts and then a 1 to represent the thousandth part of anything, they put m.m. for millimetres over the figure, and write m.m. 1 for one millimetre; and if you see a retail shop in Paris you will see this: "These grapes at so much a kilogramme"? No, that will not do. "So much the 500 grammes"? not a bit of it; but "so much a half kilo"; the wretched vulgar fraction will come up, you know.

2480. There is no objection to its coming up, is there?—I do not think so at all; I think he is a very desirable person; but I would much rather put what I am pleased to call my mind to the comprehension of one-half, or one-quarter, or one-third; that is to say, having a unit for my numerator, than I would have a million for my denominator and think out how many parts of that million I want to take.

2481. You have told us that in the countries where the metric system is introduced they do not cease to use the vulgar fractions, if they want to do so; and if we should propose to introduce the metric system why should we not also employ vulgar fractions where it is useful to do so?—If you are going to enact anything like previous enactments it will be illegal.

2482. To speak of half a kilogramme?—Yes, certainly; it ought to be 500 grammes. I am old enough to remember when the change was made obligatory in France, and, it was a newspaper joke no doubt, but there was a man named Twenty-penny (Vingt-sous) who was brought before the magistrate for calling himself Twenty-penny; "What am I to do, I am going to be married to-morrow." "You must say Mr. Frank." "Am I to be married as Mr. Frank?" I remember that joke shortly after 1840. If you leave people at liberty to do what they like under the two heads I have no objection, but if you are about not only to let every man do as he pleases;

*Chairman*—continued.

pleases; but to make him adopt the system compulsorily, I strongly object to that.

2483. But did you ever hear of any Act of Parliament in this country or any other which prevents a man from using vulgar fractions?—I heard of an Act of Parliament preventing their doing anything except use the legal weights, under a penalty.

2484. That is not an answer to my question? —Then I am afraid I have not appreciated it, because it appears to me, with all deference, to be a perfect answer. The Act of 1878 says, in Section 23: "Any person who prints, and any clerk of the market or other person who makes any return, price list, price current, or any journal or other paper containing price list or price current, in which the denomination of weights and measures quoted or referred to denotes or implies a greater or less weight or measure than is denoted or implied by the same denomination of the imperial weights and measures under this Act, shall be liable to a fine not exceeding ten shillings for every copy of every such return, price list, price current, journal or other paper which he publishes." I say that under that Act any man who stated that something was half of something would be infringing the Act.

Mr. *Gibbs.*

2485. At present you may sell by any multiple; you may sell by the 7 lb., or the $\frac{1}{2}$ lb., or the $\frac{1}{4}$ lb.?—Yes.

2486. You would not suggest that anything else should be done by the kilogramme, would you?—I think it would. You would be told that you must sell by the 500 grammes; that is what I imagine.

*Chairman.*

2487. Would you kindly go on where you left off. I think we need not take you through that question about the mental calculations; I think we have settled that?—I should like to say something about it as I attach great value to it; at all events, I should like to give you some papers, which, I think, justify my suggestion that the present system is one of simple calculation. You have had put in Paper 5, Table C., the problem of multiplying 16 tons 18 cwt. 3 qrs. 21 lbs. by 78. I have worked that out here (if the Committee think it worth the occupation of their time) in a way which performs the whole process in that number of figures (*handing in a paper*), and does it absolutely accurately. I put that forward as justifying my opinion that, as regards celerity and accuracy, the present system is capable of being worked with both. Then, again, I have got the division of that same sum. Again, with reference to Table D., in Paper 5, multiply 215 tons 17 cwts. 3 qrs. 9 lbs. by 9*l.* 11*s.* 6*d.*, the whole of that is done there on that Paper that I have handed in, and I suggest to you that it cannot be done more readily.

2488. You put that in?—Yes, I put it in, but I should have been glad to give some explanation upon it, because some one may get hold of it who says he does not understand it.

*Chairman*—continued.

2489. Certainly, if you wish to do so?—I wish to put before you another, to my mind, very important matter, as regards doing away with our present weights and measures, and that is the "short cuts" that we engineers have got, and I daresay others have got too. Let me read some of them to you if I may; I will not be very long. A foot super of iron $\frac{1}{8}$ inch thick weighs 5 lbs. One has that in one's mind with any other number of eighths; for example, $\frac{3}{8}$ inch thick weighs 15 lbs.; a yard of iron, 1 inch square, weighs 10 lbs. You have got that in your mind, and a foot therefore weighs $3\frac{1}{3}$ lbs.; 2 feet weigh $6\frac{2}{3}$ lbs., and so on. A linear foot of $\frac{5}{8}$ inch round iron weighs 1 lb. With that number in your mind you can tell mentally with the greatest ease the weight of any other measurements of round iron. For example, $1\frac{1}{8}$ inch of round iron equals $\frac{9}{8}$; square the 9 and there is 81; divide the 81 by 25, which is the square of the $\frac{5}{8}$; 25 into 81 will go $3\frac{6}{25}$ times, and if you do not like twenty-fifths all you have got to do is to say 3·24. Therefore, any piece of round iron I can tell you the weight of per foot, practically, in a moment.

2490. Do not you think that if any French engineer were put to tell you the weight in kilos or grammes of a similar piece of iron, he could do so with still greater facility?—I say certainly not with still greater facility, and my experience is that he cannot do it at all. He takes a piece of paper and figures it out from top to bottom, and then he says, "I beg your pardon, I misplaced the virgule," and he always does. Then a cubic foot of cast-iron is practically one-fifth of a ton, and for all practical purposes that is an easy thing to remember. Supposing you have got 240 cubic inches of cast-iron, divide by 4, that gives you 60; 60 is a twentieth too little, so you put upon it 3, and you get 63. These things I find in my business most valuable. Here is another thing in superficial measure. Here is a 1-inch Ordnance map, and I have got a halfpenny. That halfpenny covers 500 acres; therefore in the most easy manner, with a halfpenny in your pocket and a 1-inch Ordnance map before you, if you have a water area under consideration, and there are 500 acres, you can work it out in a moment.

Mr. *Webster.*

2491. But would it not be easy to change the size of the halfpenny to the 500th part of whatever may be the existing weight or measure?—No doubt. I want to be permitted to give you one or two more, because, to my mind, they are extremely important, and they go to that other great head of mental arithmetic. May I say, by the way (it is pertinent to what you are considering), that an easy way of converting the French linear measure into English, as everybody knows, is to multiply by 4; but that is wrong to a sixty-fourth part. Supposing you have 16 centimetres, and want to know what it is in English, say 4 times 16 is 64, then take off a sixty-fourth, and you get 6·3 left as the English equivalent in inches.

2492. You

*Chairman.*

2492. You would not go to the decimal, would you?—Certainly. I claim to use anything when it comes best to my purpose, but not upon compulsion. May I again trouble you with three more. An inch of rain off a square mile per annum gives 40,000 gallons a day. An inch of rain off an acre per annum gives 10 cubic feet a day, or 62 gallons. Then upon calculating what a pump will deliver, every yard stroke of the pump represents so many lbs. of water for each circular inch of the piston; that is to say, a 10-inch piston gives one hundred lbs. of water per yard stroke. These are matters that I have found, and I know others who do find them most helpful.

2493. In fact you have made the very best that you could of the system that we have got?—I do not know about that at all. Whether I have made the best of it or not. I do say that the system we have does give the facilities of which I tell you, and I think it is extremely likely that others could tell you of many more which have not occurred to me. That, I think, in a somewhat modified form from what I had intended, is the whole that I have to say, except in answer to any questions.

Sir *Samuel Montagu.*

2494. Would you tell the Committee whether you are satisfied with the present system of Imperial weights and measures?—Yes, quite.

2495. Do you think it is a good thing to have two kinds of pound, a pound avoirdupois and a pound Troy?—I have not considered that point. The pound Troy is out of my beat. I do not think there is any objection to it so long as the grain is the same in both, as it is.

2496. Do you think it is good for the country to have a system for weighing gold and silver, and another system for weighing copper and tin?—I do not see any objection to it.

2497. Would you see no objection if there were introduced another pound?—I certainly should not go on increasing in that direction, but many things exist which one would not re-make, and yet they are quite fit to continue.

2498. Then if you had a direction to consider the matter, do you see no way of improving our present system?—I will not say that; I have not considered it. What I have considered is: Aye or No; our system or the metric system.

2499. But supposing it were recommended that there should be one pound chosen instead of two, would not that be an improvement?—I cannot tell you unless I know how far it would interfere with certain trades. It may be that you would be buying the simplicity at too great a price.

2500. You lay great stress upon the value of mental arithmetic; do you find that it is a general qualification to be quick at mental arithmetic among adults?—You mean do I find the power of mental arithmetic common?

2501. Yes?—Yes, I do. I have many persons in my employment whom I expect, without putting pen to paper, to give an answer to some rather complicated figures.

2502. Would you have the same faith in the result from mental arithmetic unchecked that you would have if it were put down on paper by an ordinary person?—That depends upon the extent of it and upon the person. I do not wish to say it flippantly, but I have much more belief in the result of mental arithmetic by a fairly good man not overburdened with the question, than I should have in the result of any string of decimals.

Sir *Samuel Montagu*—continued.

2503. But, with regard to the string of decimals, are not two or three places practically sufficient for all ordinary uses?—No, I do not think they are. I have handed you in a paper just now where you will find that the decimal mode of doing it does not agree with the duodecimal mode, and does not agree because I contented myself with two places of repeating decimals.

2504. But, for ordinary shopkeeping and purchases, do you find it necessary to be so minute?—I have no experience in shopkeeping by decimals: I do not think there is much.

2505. You quoted France; have you any knowledge of the way in which retail trade is carried on in France?—No. I have seen a good deal of the way in which bankers, for example, are troubled with their mode of calculations. I have given you an instance of the man who gives you a railway ticket who cannot for the life of him do a bit of mental calculation. I remember at Strasbourg one day I had had a fiacre at 2½ francs an hour, for 2½ hours, and the driver and the porter were both in agony as to what it came to. It never occurred to them that it was 6¼ francs.

2506. Would not an English cabman have had the same difficulty?—No, I do not think so at all.

2507. Two-and-a-half hours at 2*s.* 6*d.* would be the corresponding thing, would it not?—Do not you think he would say 6*s.* 3*d.*, in a moment, except that it is not a legal tender, so far as he is concerned, I believe.

2508. You gave an instance with regard to squaring 4¼ and 4·25; is there anything in law to prevent a Frenchman squaring 4¼ instead of 4·25?—I do not know that there is, but he has got out of the use of the quarter; 4·25 is the thing that he deals with.

2509. Is it not the fact that wherever the decimal system prevails, they still make use of halves, quarters, and eighths?—They certainly do of halves. I have quoted a case in Paris where you find so much a half kilo.

2510. Is there any objection to that?—I do not see any, but I do not think they use it as a rule because they have not a practice of it.

2511. In the United States do you know that quotations consist almost invariably of so many cents and a fraction, 9¼ cents, 9⅛ in quoting for any staple such as cotton?—Yes; the cent not being small enough they go below it.

2512. Therefore as a matter of common practice adopting the metric system does not necessitate disusing, when it is more convenient, vulgar fractions?—I do not mean to say that it necessitates it, but it habituates people to the disuse of vulgar fractions, with the result that you get a body of persons who cannot calculate mentally.

2513. Are you not aware that it is the habit, in

Sir *Samuel Montagu*—continued.

in America especially, to use vulgar fractions in connection with the decimal system?—I should like you to give an illustration. My knowledge of the American system is that they take 2,000 lbs. instead of 2,240 for the ton, and they have our old gallon which is five-sixths of the Imperial gallon.

2514. But in their price lists do you not see that vulgar fractions are constantly used?—I do not know; those are documents that I do not have to consult.

2515. Are you aware that with the exception of Russia and the United Kingdom all Europe is on the metric system?—I think it is very likely. I have not been to Spain or Portugal.

2516. Are you aware that all South America is on the metric system?—No, but I think that is also very likely.

2517. Do you know that Japan is on the metric system?—I daresay; they are a very progressive people.

2518. And that we with Russia are isolated, certainly in Europe?—I hardly understand the word "isolated." If you say that we with Russia are those who do not use the decimal system, I agree. I do not know about being "isolated."

2519. Is there any reason for thinking that the English people of any class are less intelligent than the natives of the other countries of Europe?—I have not enough acquaintance to say. I think the English people are sufficiently intelligent for most things, but they are very much addicted to adhering to what they have been in the habit of using.

2520. Have you heard of any desire on the part of France or of the other countries who have adopted the metric system to go back to the old system?—No; I should think they would be in precisely the same difficulty as we should be in if we go to the metric system compulsorily.

2521. Therefore if the metric system were thoroughly known in this country you would see no objection to its continuance?—I should; I think you would do harm and impede calculation, and as I say, you would entirely put a stop, as a matter of fact, to mental calculation.

2522. Are you aware that the metric weights and measures are used exclusively in this and other countries for chemistry, physiology, and electricity?—Do you mean legally or actually?

2523. Actually?—Yes; no doubt this movement comes from scientific men. I suppose I am right in saying that till within the last 30 years, the bulk of scientific teaching was done on the Continent; many of our best professors got their knowledge there, and they were brought up on the metric system and have kept to it.

2524. Are you aware that there are text-books on this subject which are used in technical schools, making it necessary that the metric system should be learned?—I believe so.

2525. Are you in favour of both systems being taught in technical schools?—I do not care about technical schools at all; I am thinking more of the ordinary schools, and the ordinary every-day life of the country.

2526. Are you opposed to the metric system being taught in schools, technical and other?—

Sir *Samuel Montagu*—continued.

No; I tell you I am not opposed to both systems being used conjointly.

2527. Then it comes to this, that you would be in favour of the metric system being permissive in this country, and if various trades took it up, and were content with it, you might reconsider whether it should be made compulsory with the rest of trade?—Of course one might reconsider, but I should want very strong evidence that there was a desire on the part of the country, as a whole, for the change.

2528. But we have been informed, especially at our last meeting, by one witness that if it were made permissive his trade would adopt it at once readily?—Very well, he might. I cannot help thinking it would be a long while before the shopkeeper, who only serves his customers by the metric system, would augment his custom if he kept it together.

2529. Do you think there is more risk with regard to the decimal points in ordinary transactions than by working with our present weights?—I think so; and I will tell you why. The figures before and after the decimal point do not strike the eye at all; they have no obvious value; when you deal with tons, cwts., quarters, and pounds you cannot make a mistake. On seeing 30 lbs. attention would be called at once, knowing that it was more than a quarter; again, no one could write 5 quarters; he would see that it was more than a cwt., and he could not go to 21 cwts., because he would be stopped by the ton directly.

2530. As to these papers which you have handed in with these "short cuts," do you find them at all general. I refer to this calculation of 16 tons 18 cwts. 3 qrs. 21 lbs.?—I do not call that a short cut.

2531. Sixteen tons 18 cwts. 3 qrs. 21 lb. multiplied by 78; you treat that as being 16 tons 19 cwt.; you seem to take the two known numbers and then to deduct the difference?—If you refer to Table C., I have taken 16 tons 19 cwts.

2532. And then you deduct the fractions?—Then I deducted that which was wrong, which was 7 lbs., which is the one-sixteenth of a hundredweight.

2533. And that is adopted in mental arithmetic?—Yes.

2534. To take the nearest round figure, and then to take off the difference, or to add it, as the case may be?—Whichever is the most handy. Supposing I had to determine the price of a thing at $5\frac{3}{4}d.$, I should use $6d.$, and deal with the farthing separately.

2535. Is such a system generally in practice, or only by you and your immediate surroundings?—It is generally practised, within my experience.

2536. By other engineers; that they alter the sum, making it a round sum, and deducting or adding afterwards?—I should say so; I should expect anybody in my office to do it; I know my partner would do it.

2537. But would it not be just as easy with decimals?—You would have a string of figures nearly the length of the paper. You have it in the

Sir *Samuel Montagu*—continued.

the paper I have already put in. Look at it in decimals!

2538. But you have also the option of adopting the vulgar fractions?—Here is the result of that. I am told that one of the reasons for wishing to change this present system to the metric system is that it is easy of calculation. I suggest that there is no need to change on that ground, for the calculation is, to say the least, as easy under the present conditions.

2539. We have been told that in marking the measurements of feet and inches by dashes, mistakes have occurred frequently in the engineering profession?—I do not know what you mean by dashes.

2540. Marking off the feet and inches by a mark—a stroke?—I hardly follow. If you mean that a carpenter, instead of marking 20 inches, marks 19 or 21.

2541. No, I mean 1 foot and 1 inch, or 1 foot and 3 inches?—Making a mistake between 1 foot 1 inch, and 11 inches, or between 1 foot 3 inches and 13 inches?

2542. Yes; it was pointed out to us that that was much more likely of error than 10 times the quantity; do you understand what I mean? It was thought that such a mistake would be more easily overlooked than a question of 10 times, which the misplacement of the decimal point would involve?—I cannot agree with you. I quite concur that it is a possible ground of mistake, but I think the liability for that kind of mistake is less than the other.

2543. But the difference between 1 foot 1 inch and 11 inches would be less apparent, you would admit, than if it were 1 foot and 10 feet?—Clearly.

2544. Is not the fault in France, do you not consider, rather with regard to their mode of teaching the metric system than any fault of the system itself?—I have never witnessed any of their teaching. I presume they teach correctly, but some of the evidence that I have read before this Committee goes to show that there is no teaching of arithmetic at all; it is not needed.

2545. In Germany the weights and measures are learned almost at sight, are they not?—There is no evidence of that.

*Chairman.*

2546. There is no teaching of tables as we teach them?—No.

2547. Because there is nothing to teach?—Just so. Therefore, I can hardly imagine that difficulty arises from defect in teaching.

2548. I think it is not quite correct to say that there is no teaching of arithmetic; they teach arithmetic but they do not teach tables?—I think the evidence went to this: how much of the boy's time in an English school went to arithmetic, and the evidence is what is there in Germany to correspond. That is the contrast, no doubt. It might mean tables, and it did mean tables, but I cannot agree that there are no tables in the metric system, because as a matter of fact the notation is not what probably was intended originally; that is to say, you do not take for example the gramme for each unit and work upon it, but you have different names as you go along; the kilogramme to wit.

Sir *Samuel Montagu.*

2549. Is it not the fact that in ordinary use in 99 transactions out of 100 the gramme is sufficient; the gramme only without its component parts, or its decimal parts?—Take the gramme, 15½ grains, I say that that is too small a weight except for scientific or medical purposes, and the French themselves have discarded it in favour of the kilogramme.

2550. In ordinary trade all over Europe they use the kilogramme, the half kilogramme, and the gramme, and you hear of nothing else; is not that so in the ordinary commerce of other countries?—I want to answer your question and say that I disagree with you. Instead of saying a thousand kilogrammes they say a ton; a ton is a common French measure of weight in these days.

*Chairman.*

2551. Yes, they call it a ton, but it is 1,000 kilos?—Yes, but I thought we were talking of the words used.

Sir *Samuel Montagu.*

2552. The ton is not used in all trades, or anything like it, in France?—I cannot say all trades; I do not suppose, for instance, it is used in cotton, but I say that the ton is used to express a large quantity, say, of iron, metal, copper, and things of that kind.

2553. There is no particular objection in using the term, but in the ordinary small trade, which, after all, is the bulk of every country's commerce, the gramme, the kilogramme, and the half kilogramme, are the only weights that you hear of?—I suppose in the retail trade that is so. I should say that the gramme is very seldom heard of in ordinary household trades such as the butcher and baker.

Mr. *Wrightson.*

2554. You mentioned some very useful short cuts, engineering short cuts; the question of a square foot of iron one-eighth of an inch thick being five pounds and so on; you do not claim for those short cuts anything else but being coincidences, do you?—They are coincidences, that is all.

2555. I suppose it is quite probable that there might be equally useful coincidences in the metric system?—I do not know whether it is probable now, because unless they have been already developed, I should think not, and I do not know that they have been already developed. I have never heard a suggestion of similar things with the metric system.

2556. In the case of our notation, that is the decimal notation, we go up from units to tens, from tens to hundreds, and from hundreds to thousands, and in the addition of a lot of figures by our process, it is an extremely simple thing on account of its being a decimal notation, is it not?—Yes, it is.

2557. Do not you think that if you are to note tons, hundredweights, quarters, and pounds, you could not add them up in the same way; you have not to introduce other operations?—I quite agree that for the purposes of addition (I have written so before) the metric system is the easier:

Mr. *Wrightson*—continued.

but I feel inclined to say, very slightly so. I do not know of anybody who is ever bothered by adding up pounds, shillings, and pence, by the fact of having to divide by 12, and then by 20.

2558. And all the carrying forward?—It is an entirely mental matter of the greatest ease. How many men there are who can add up the three columns together.

2559. Do you think there are many?—Well, there are men who can.

Mr. *Godson.*

2560. About these short cuts, I take it that you do not propose that they should be taught in schools; that is a thing that you derive from your own practice, by your vast experience, is it not?—I have derived it from my own practice; but I think it would be a very good thing if it taught in schools.

2561. But you would not like to propose that such a course should be adopted among our children, would you?—I think it would be a very good thing indeed for anybody who was about to become either an engineer or an architect.

2562. To get up certain mnemonics, to get up certain guides to arrive at a certain result?—Yes.

2563. Then about the calculation by the railway clerk; did you ever see a railway clerk in England who when you asked him for two tickets of one class, and three of another, ever gave you the amount without putting it down on paper?—I should say that I never saw a railway clerk in England calculate on a piece of paper in my life. That is my recollection, at all events. I may tell you that I do not travel with my flocks and my herds, and my little ones. I do not give him calculations of that kind, but three ordinary tickets from A to B I refer to, for instance.

2564. I thought you meant to go further than that; three first-class, two second class, four thirds?—I think that most railway clerks would do that.

2565. Did you ever, in your experience, see a man go beyond your one class?—I have certainly seen him go to two, that is to say, for oneself and one's servants.

Sir *Edward Hill.*

2566. Do you not think that the clerk would be very unwise who trusted to his mental powers to ascertain how much it would be for three first class, three second class, three thirds, and a couple of dogs?—You may multiply it by a regiment of soldiers and a body of marines, and so on, and, I think, then he would be unwise to do so; but I am talking of ordinary reasonable practice; then I do not think he is at all unwise, and I think the proof of it is that he does not get wrong in his calculation, or he would hear of it.

2567. Then as regards clever people who can add up three columns of figures all at once, would you be disposed to accept the result of their calculations?—Of those men I would, because no doubt they are specialists.

2568. Then while you have informed us that you have a strong predilection in favour of our

Sir *Edward Hill*—continued.

present system, I think you have also admitted that if there were to be any alteration it should be in the direction of the metric system?—To me it is clear. No one in these days, I imagine, would invent a third system; it would be monstrous.

2569. But you, I take it, do not hold the opinion of many people engaged in scholastic work, especially one celebrated gentleman who came before us the other day, that there would be a very considerable time saved in education in consequence of the greater simplicity of the metric system; he said that it would make a difference of at least a year which he thought might be devoted to some other mental gymnastic exercise?—I cannot imagine that. I should have thought that the whole of our weights and measures might be taught in six months to any boy of average intelligence.

2570. But the evidence which we have had rather goes to give us the idea that those six months' boys are not very plentiful?—It is a long while since I went through the process, but my memory is that I never found it difficult or found it interfere with any other study.

2571. As regards drugs, we have had some evidence about the weighing, and so on; do you uphold the present hieroglyphical system of writing prescriptions?—Really I must leave that to those who are writers of prescriptions, or those who make them up. I have no opinion to give upon that at all.

2572. Without pretending to understand them, do not you think that there is much less danger of being poisoned if they have the French system of so many grammes, and so on; and do not you attach importance to this fact also: that a continental prescription which is always written by grammes could be easily made up without any difficulty in this country or *vice versâ*?—Yes, I think there is importance in that, no doubt; therefore I say that I do not object to the use for all purposes in England of the metric system.

2573. You would like to see it introduced in fact?—No, I should not. There are many things that one feels that one has got to put up with, but one cannot love.

2574. But may I not ask you whether you are not very much impressed with the disadvantage that we are under in trading with all the nations of Europe with the exception of Russia, in consequence of our different system?—I have endeavoured to give full effect to that by saying that I recognise that, and should be glad of a change which would allow every person engaged in trade to use the metric system if he liked for all purposes, but I do not want you to make me use it.

2575. You would not, I suppose, class Russia as being a particularly progressive nation?—I know very little about it.

2576. Japan you do think progressive?—I believe it is.

2577. At any rate, assuming that it were to be considered desirable to make a change in the direction of the metric system, do you consider that there would be any greater difficulty in this country than in other countries which had a still worse system of weights and measures?—I should imagine

Sir *Edward Hill*—continued.

imagine that there ought to be greater difficulties, because, if the other system were so bad, people would be more desirous of changing.

2578. It is a question of change from their old habits to new ones. That has been effected in all these other countries, and my question was, whether you anticipated that there would be more difficulty in doing that in England, with the spread of education and so on that is enjoyed now, than there was in those countries?—I have a feeling (I cannot give you grounds for it; it is a feeling and not a knowledge) that we are more difficult to move to new things than most people.

2579. I think you said that you were not satisfied altogether with our present incongruous system of weights and measures?—If I said so I made a mistake; I did not mean to say so. I am quite satisfied that it can go on perfectly, except upon this question of foreign commerce; and that I say may be, and very likely is, a grievance and a difficulty, and I should be glad to see that grievance and difficulty removed; but that does not appear to me to involve imposing the metric system upon the nation as a whole.

Mr. *Stevenson.*

2580. You mentioned a halfpenny covering 500 acres upon a 1-inch ordnance map; is there not a similar facility in the 25-inch-to-the-mile ordnance map, the square inch being a square acre?—Yes.

2581. That, I presume, is accidental rather than intentional?—I presume so. I do not suppose the halfpenny was made the exact inch diameter for the purpose of measuring the ordnance map, although I was told on very high authority that it was.

2582. I meant that it was accidental in the ordnance map, that, however you measure it, the square inch works out to a square acre on that scale?—On the 25-inch-to-the-mile ordnance map there are 625 square inches to a mile, and there are 640 acres; it is not absolutely accurate.

2583. I believe it is more approximately accurate than that?—Because it is really more than 25 inches.

2584. In regard to the metric system, have you considered the enormous number of transactions which take place, say, with costermongers' stalls in the streets, where all the arithmetic that they practise in the nature of the case must be mental, from the absence of pencil and paper?—Yes.

2585. Do not you think that we should have regard not only to the interests of science and commerce, but to the convenience of the great mass of our less intelligent and more helpless working people?—Yes, I think so. Then there is another instance of mental arithmetic; take a butcher's shop and the wife helping the husband; that woman has no difficulty in telling you what 3 lbs. 4 ozs. are at 9*d.* a lb., or 9½ lbs.; it is habitually done.

2586. But if she has to do that in centimes and kilogrammes, it will involve a number of figures?—I am afraid so.



Mr. *Webster.*

2587. Are you aware whether the use of metrical weights and measures is legal in trade generally or not, in England?—I only know from the evidence that has been given before you, and from my endeavour to interpret the Acts of Parliament, and the honourable Chairman tells me that I put a wrong interpretation on the Acts. I gathered that the metrical weights and measures were legal for all purposes except retail trade; that is what I gathered from those Acts.

2588. I suppose you have read the evidence which has proved to us that they are not legal for any trade at all?—I have not come across it. I have not read the whole of the evidence before you, but Mr. Chaney's evidence, to my mind, only went to the point of saying that he did not wish to commit himself to that which involved a legal question.

2589. If I understand you rightly you are in favour of both the present system and the metric system being used concurrently?—I am, upon the one ground that it probably may facilitate our trade with foreign countries.

2590. But, presuming that the metric system was found to be the better system of the two after a few years, would you not then be prepared for us to have one system instead of two?—I suppose the survival of the fittest would then come in.

2591. That would be a great deal better, in your opinion, would it not, than having one system for internal trade and one for external trade?—I am not clear about that, because I do not yet see my way to the great ease of calculation which I think pertains to our present system.

2592. I do not know whether you have read the evidence given to us by various scholastic authorities, to the effect that the metric system is so much easier that it would save probably a year or even more for our children in schools?—I came across one evidence of that kind; I do not think I came across more than one. I have not been able to read the whole of the evidence.

2593. But, if that evidence is correct, if we have the two systems running always concurrently, would it not entail greater work upon our children, because they would have to learn the present system for internal business and the metric system for external business?—Yes, if they had to learn both. All I am saying about the metric system, allow persons to use it who want it, that is all.

2594. Have you inquired at all whether in the countries where they use the metric system the old local weights and measures, such as we have in Lancashire and Dorsetshire, and all over the country, have to some extent died away?—I have not inquired as to that.

2595. I should like to ask you this: You gave evidence with regard to the hundred; that all our calculations were made in hundreds in adding; is not the hundred a very much easier figure to divide than any other figure?—No, it is certainly not as easy as 120, or as easy as 240, which is a very admirable number to divide.

2596. Supposing there was a contract, and one man had to take $\frac{25}{100}$ths of the contract, and another

Mr. *Webster*—continued.

another $\frac{25}{100}$ths, and another $\frac{40}{100}$ths, is not that an easy way of dividing the contract out?—Yes, certainly.

2597. Or if one had to take $\frac{35}{100}$ths, another $\frac{26}{100}$ths or $\frac{40}{100}$ths, is not that a very easy and simple plan, which does not require calculation in a man's mind to know the proportion of the contract that he is to carry through?—Yes.

2598. If that is simple in dividing the contract, why should it not be equally simple in dividing a weight or measure, because a hundred is only 10 times 10?—I am afraid I hardly follow you. Could you give me a concrete example?

2599. I will put it in this way: taking any weight or any measure, you would not say that one proportion of 10 times 10 or 100 would not be easy to divide in the proportion of 100?—Clearly; but I am afraid that it does not please Providence that our needs should always go in hundreds, and directly you get to a hundred and something else, I do not see where the ease is. Supposing a man says to me, "I want 125 bricks of you, what proportion will you take," I do not know where I am; I cannot help it; he gives me 125; he will not give me 100.

2600. Would it be equally simple under the metric system to have a hundred for the unit, and 25 would be $\frac{25}{100}$ths of the second 100, and that would be easily described as 1·25?—I am afraid, I am quite certain, that I do not follow you. I agree that if you have a hundred to divide, nothing is easier than to divide it into any number of parts you please, from 1 to 99; but you frequently have to deal with numbers which are not hundreds, but more or less; and then I do not quite appreciate your question as to the ease of division.

2601. Just one other question: I do not think you quite understand my point; I am perfectly conversant of the fact, as you must be, that 100 is 10 times the decimal system or metric system; but I simply take 100 as a convenient number, being 10 times the metrical unit?—I am afraid I do not know what you mean by 10 times the metric system.

2602. Ten times 10 is 100?—That is an undoubted fact.

2603. I ask you whether 125 would not be as easily described under the metric system than under the present system?—If you will show me how the metric system would describe it I can answer the question; at present I do not see how it would describe it.

2604. I simply ask whether, in your opinion, 125 would not be as easily described under the metric system as under the present system?—Certainly, because it would be 125 in any case.

Mr. *Jasper More.*

2605. If the Reference to this Committee is to inquire whether there should be any alteration in the system of weights and measures, would you suggest any other besides the simple addition of the metric system to the present existing weights, or is there any other alteration that you would suggest?—My attention has not been called to that question of the troy weight and the avoirdupois weight. I think that that might well be the subject of consideration.

2606. Are you satisfied with the hundredweight?—Quite.

2607. Of 112 lbs.?—Yes.

2608. Are you satisfied with having the cental running concurrently?—At the present time I believe it has been innocuous.

2609. That was added in 1888?—Yes; and I think the evidence before you is that its use is practically confined to Liverpool for the corn trade.

2610. Your suggestion is that the metric system should be a further addition to our system?—That anyone should be allowed to use it legally for all purposes.

Mr. *Godson.*

2611. I understand that you are not against its being made permissive?—No.

2612. Do you know that at the present moment the carpet manufacturers of the United States have determined to take the metric system so as to enable them to meet the wants of the countries of Europe?—That I did not know.

2613. They are now considering it, or have agreed to it; and you would permit English manufacturers, I suppose, to do the same?—Yes.

*Chairman.*

2614. Is there any other point that you wish to bring before us?—Nothing occurs to me.

Sir Benjamin Baker, F.R.S., called in; and Examined.

*Chairman.*

2615. You do not require any introduction, I think, to the Committee, because you have, I know, had a particularly long and very considerable practical experience in the use both of the English and the metric system of weights and measures?—I may say that I am almost equally familiar with both systems, in consequence of having carried out works abroad.

2616. You have heard the evidence of Sir Frederick Bramwell; I will not ask you whether you agree with it all; but do you think that the suggestions that he made to the Committee, namely, that the metric system should be made legally permissive, concurrently with the present system, and without any idea of making the metric system ultimately compulsory, is one which you can agree with, or not?—I will agree with Sir Frederick Bramwell as regards the first portion of the statement, that is, that the transition might be rather gradual, but I think that it should be with a view of making it compulsory ultimately.

2617. Then, in that view, I understand you do not agree with the conclusions of Sir Frederick Bramwell?—No; I differ from almost all his conclusions, both as to the facility of mental calculations and in other respects, I think.

2618. You have been consulting engineer, I believe,

*Chairman*—continued.

believe, to the Norwegian Government, for railway structures, where about 20 years ago the transition was made from the foot to the metre?—That is so. The Norwegian foot, I may say, was 12½ inches, and they changed over to the metric system about 20 years ago. The change was made suddenly. The drawings came from Norway, of bridge work, with a good many detailed figures on them; they came over here one week in feet and inches, and the next week they came over in metres, but there was not the slightest difficulty in the transition here, either at my office or at the manufacturer's works.

2619. Can you tell us anything about the difficulty of the transition in Norway itself, where I understand the change was made compulsory at once?—I asked the Norwegian engineer-in-chief, and he seemed to look upon it as a very old story, because the transition had been made in other countries before, and it was thrashing a dead horse, in his opinion, to go through the old feat again. No doubt there is a little difficulty at first, but it is only for a very short time, and I think in this country it would be far less than in those other countries; because you find that our common men here, even such unintellectual men as grooms at stables, are accustomed to think in two standards at present; they think of the height of a horse in hands, and of their own height in feet and inches, and there is no mental difficulty about it at all. And the workmen, in the same way, think in feet and also in metres, but they do not, in my experience, go through the mental labour that Sir Frederick Bramwell does of turning the metres into feet and inches before they realise what they mean; in a short time they get to realise what the metre is, so that they do not bother about putting it into feet and inches. And they think of their own weight in stones and of the weight of a beef-steak or a joint of meat before them in pounds, and they do not put their own weight into pounds from stones. I mean that men of an ordinary low mental capacity are accustomed to think in two standards without going through the mental process that Sir Frederick Bramwell does in order to realise what a metre or a kilogramme may be.

2620. What is your conclusion from that?—My conclusion is that the difficulty of transition would be even less in this country than it has been in other countries, and in the case of Norway to which you specially referred. I say that the question of difficulty was never raised in Norway, because the people there regarded it as having been fought out in France at the beginning of the century, and in Germany later.

2621. There was practically no difficulty?—There was none.

2622. You have had a great deal to do, as we know, with Egypt, where, as we all know, the metric system is adopted?—Yes, and there the Public Works Department is, of course, under English control at present, and there are English engineers who have been trained in English measurements; but I have, like them, always found the greatest difficulty after a visit to Egypt in dropping back into our system; it is painful: every



*Chairman*—continued.

operation takes three times the time. When you are accustomed, as most engineers are, to work with a slide rule, of course you are obliged to use the decimal system; if you are dealing with one hundredweight three-quarters you have to put it mentally into decimals, 1·75, before you can deal with it on your slide rule. I should say that three-fourths of my calculations in taking out quantities are done with the slide rule, and it is much easier to use a slide rule than to carry short cuts in your head such as Sir Frederick Bramwell indicated.

2623. Taking you as an engineer having very great experience in these methods of engineering calculations, are you of opinion that labour would be saved by the adoption of the metric system, or is saved when you do adopt it?—It is incomparably simpler in the case of such operations as measuring up works. When you are measuring up railway works, or anything of the kind, and taking out the quantities of the weekly work, and take the time-sheets as a basis of cost on the two systems, the difference is simply marvellous.

2624. In that respect, then, you differ, as you say, from Sir Frederick Bramwell's evidence?—I differ wholly as regards the respective facilities.

2625. We may take you as two eminent engineers, probably two of the most eminent in the profession, and I want to ask you whether you think, from what you know of the profession, that you are expressing the feelings and opinions of the profession in general, or whether Sir Frederick Bramwell is doing so?—I have already said that I know hundreds of English engineers who have drifted necessarily into the metric system and the decimal system, and I have never heard one who would come back to the English weights and measures if they had the option. In numberless cases it is so much easier. You have only got to remember the specific gravity of different substances and you get all you want readily without short cuts, whether it is iron, or brick, or other material.

2626. No doubt, as Sir Frederick Bramwell stated to one honourable Member of the Committee, these short cuts which he brought forward are very useful?—There are the same coincidences in the metric system.

2627. And you might call them exceptional instances, might you not?—Yes.

2628. And similar exceptional instances, you say, or probably a larger number, could be brought forward on the metric system?—Yes, and I might illustrate that. About two months ago I was giving evidence in the Law Courts, in a dispute between the Corporation of Manchester and the Corporation of Salford, and Mr. Fletcher Moulton, who is a Senior Wrangler, asked me this question in the box. He said: "Will you take down these figures, please: 1,686 acres; a rainfall of ⅜ of an inch in 24 hours flowing off it; inhabitants, 60 per acre; quantity of sewage, 30 gallons per day per inhabitant; what is the flow through the sewer in cubic feet per minute?" That was in the witness-box. The units were all muddled up. I set to, and as I had not got my slide rule, said, "You must give me a few minutes," and then gave him the answer. He

*Chairman*—continued.

said: "I am sorry to say it is not quite right"; and counsel on the other side said: "I have every sympathy with him." I replied: "I am not far wrong"; and I checked it mentally on the metric system, because there it was absolutely easy. I simply put the acres into hectares, by multiplying mentally by ·4, = 670 hectares; $\frac{3}{8}$ of an inch about, and that is a little less than a centimetre, and at once I had got a check.

2629. You had got it in cubic metres?—Yes, I got it at once.

2630. Then, so far as the metric system is concerned, you do not share Sir Frederick Bramwell's opinion that our system is a beneficial one, and that the metric system is very deficient in power in that respect?—No, especially if you have anything to do mentally. Of course I do not exclude halves and quarters, and no one does; you use them if they are convenient, but for most mental work I begin by putting the thing mentally into decimals. Then what do they do on the Stock Exchange with dividends at 3 per cent., 3¼ per cent., and 3½ per cent. They do not, as Sir Frederick Bramwell said he did, prefer fractions and call $\frac{1}{33}$ or $\frac{1}{33}$ the year's interest, but they put so much per cent. on the decimal system.

2631. Practically, they do use decimals?—Yes, of course: you do not say $\frac{1}{33}$ instead of 3 per cent.

2632. Can you give us any opinion, from your experience, as to the handicapping of our trade with foreign nations by the existence of our system, and the use of our system, as opposed to the metric system?—I have heard complaints over and over again from clients abroad where I have been consulting engineer. They say it is so inconvenient to send out manufacturers' catalogues in which the dimensions are in feet and inches, whilst the Germans and French send out catalogues with metric measures which they understand, and if they are ordering a centrifugal pump they do not bother to know whether a 12 inch or a 16 inch is what they want; they prefer to get it from catalogues where it is all in metric measures. And, of course, a double system becomes very inconvenient in such cases, because of the duplication of patterns. And the centimetre is not an exact part of an inch.

2633. Then you think that there would be considerable friction and difficulty in using the two systems side by side?—Yes, there would be at first.

2634. And, if I understand you, you believe that the metric system is simpler and better, and you would like to see a certain time fixed, after which the metric system should be made compulsory?—Yes.

2635. What do you think that time should be?—I think it would possibly vary in different trades. I believe that in Germany the time was 2½ years.

2636. Do you think that would do for us?—I should think it would in most instances.

Mr. *Godson.*

2637. Supposing you began with the new century, in five years' time?—I should welcome it with great joy. I think it would be the best piece of work that had been done for a long time in the way of legislation.

Mr. *Godson*—continued.

*Chairman.*

2638. You look upon it then, from your point of view, as a serious detriment that we are suffering so far as regards our trade with foreign nations?—Yes, so far as I am able to judge of the matter I certainly do.

2639. With regard to our home trade, do you think that home traders who trade with one another in England would, after a while, become not not only accustomed to it, but would regard the change favourably when it became familiar to them?—I think so. I think it would save them, personally, such a lot of trouble when they were used to it that they would welcome it. But as I have already explained there would be a transition time during which there would be a little inconvenience because of all the different standard patterns which manufacturers have now of machinery. If you were ordering a duplicate part you would not get an exact multiple, you would not be exact to a hundredth of an inch.

2640. That would necessitate some little time to elapse before the thing was readjusted?—Yes; but that has of course occurred in all other countries, and no doubt it would be surmounted in the same way.

2641. Would you like to see the metric system taught in schools and explained fully as a sort of preliminary subject?—Yes; I think that is really a necessity if we are not to be left behind.

2642. But do I rightly understand that you wish to wait until people who have now been taught the metric system have grown up and are able to understand it, or would you make the change more rapidly than that?—I would make the change far more rapidly.

Mr. *Wrightson.*

2643. I suppose the fact of our being such large manufacturers would entail a great deal of inconvenience in the change, on account of all our gauges, and so on?—Yes.

2644. So that perhaps the time that would be required to make the change might be somewhat longer than in the case of a country that was less developed?—Yes, I should say that possibly the time would vary in different trades; but improvements, you see, are made in machinery, and the pattern is very often altered, and then I think any new pattern should at once go on the metric system.

2645. You do not attach much value to those statements of Sir Frederick Bramwell with regard to the coincidences, those rather convenient measurements which he called short cuts?—No, because they arise equally in any system; you will find coincidences of that sort in any system.

2646. Is it not likely that they would be more frequent, almost, in the metric system where your divisions are more regular?—Yes.

2647. And more proportional?—Yes, I should have thought so; but I quite agree with the honourable Chairman that those short cuts are rather an evidence of the inconvenience of the present

Mr. *Wrightson*—continued.

present system; if it is worth taking the trouble to get those coincidences and to search for them. And none of Sir Frederick Bramwell's were quite right, although they are nearly.

*Chairman.*

2648. And you do not want a short cut when you have a straight road?—No.

Mr. *Wrightson.*

2649. Then Sir Frederick Bramwell in his evidence distinctly admitted that in the case of addition there was no mental advantage, I think?—Of course Sir Frederick Bramwell carefully avoided the subject of addition, because we know how difficult that is. I detest it myself; I always make mistakes in addition; you cannot do it with the slide rule, and that 12 pence, and 28 lbs. to the quarter, and the rest, simply bother my life out, as you have to make a division before you can go on with your addition.

2650. And if you had to make a calculation under the ordinary duodecimal system, you have said that you generally check that by a decimal operation?—Yes.

2651. You would never think of checking it again, would you, by the duodecimal system?—Certainly not. I will give you an illustration. The other day I wanted to see about the durability of steel sleepers. I got the weight of the sleeper when laid down, which was 1 cwt. 1 qr. 24 lbs., and when taken up it was 3 qrs. 26 lbs. I did not know what was the percentage of rusting; it conveyed no idea to my mind without first of all reducing the two weights to one common measure of lbs.

2652. Do you think that you can arrive at a matter of that kind in the form of a percentage more conveniently than you can in the form of a fraction?—Yes. As I have already said, the percentage system is universal in Government loans, railway shares, and all other operations and undertakings of that kind. The stock of a railway is generally put in hundred pounds, and the amount you receive per annum is expressed in parts per 100*l.*, and you can at once compare one investment with another.

2653. So that a large class of people do think in hundreds, in fact?—They do at present; men, women, and children. I might add that that is no bar to the use of fractions. You speak of 2¾ per cent. or 3¼ per cent.

Sir *Edward Hill.*

2654. If I have gathered rightly the point of your evidence, it goes to this: that you are thoroughly dissatisfied with the present system of weights and measures?—I am intensely angry with them. For about a fortnight after my return from abroad I think there is nothing more foolish in the world than our weights and measures until I get used to them again.

2655. You condemn equally the duodecimal system and the decimal system?—They should not be used conjointly.

2656. And, in your opinion, is the metric system which has been adopted by all the civilised world, except Russia and ourselves, the system that should be adopted supposing that any change were to be made?—Yes; and I think that we inevitably shall adopt it, sooner or later.

2657. You are aware of the difficulties which have been experienced in introducing it into other countries, and you know that they have been got over without any great amount of difficulty?—Yes.

2658. And you do not anticipate any very great difficulty with our countrymen here?—I think it would be a great disgrace to this country if, with our present system of School Board education, there should be a tenth of the difficulty that there was in introducing it into France, when the people were universally ignorant.

2659. You think that if our education is worth anything at all, it ought to render the transition very much more easy than it would otherwise have been?—Certainly.

2660. And you have come to that conclusion not only with regard to scientific calculations, which are extremely nice, but also in regard to commercial transactions and home transactions?—Yes.

2661. And in your opinion, the difficulty with dealers in small quantities is one that would readily be got over after a little time?—I think the small dealers would in a few weeks be very much in love with the new system, because it would facilitate all such operations as the butcher's wife stating at once what was the value of a particular piece of meat. They do it now, simply because they have stored up in their minds the absolute figure that 7½ ounces at so much is so much; they do not multiply it out in their minds, but they know it as a fact, just as you learn the multiplication table. I have asked them how they do it, because, as a rule, the butcher's wife can do it much quicker than you can; and it is the fact that they do it because they have learnt what those things are, in the same way as we learn the multiplication table.

2662. And as regards accuracy of calculation I suppose there is not really any argument in favour of our present system; it must be more accurate to add up decimals than to add up a long column of tons, cwts., qrs., lbs., and ozs.?—Yes; in many offices I am certain that the difference between the two systems would be represented by 20 or 30 per cent. of the clerks; that is to say, you could effect a saving of 20 or 30 per cent. of the clerks. I believe you would in merchants' offices.

2663. Have you considered the matter from a scholastic point of view as regards the saving of time in not having to learn these complicated and difficult tables and their calculations?—I think it goes really without the necessity of any argument that it places at the disposal of the teacher a certain amount of time which might be employed in useful matters.

2664. As a scholastic gentleman put it, the scholars might be employed in other mental gymnastics to much more advantage?—Yes.

Mr. *Stevenson.*

2665. In the case of the steel sleeper where you wished to ascertain the amount of the waste, the trouble arose by the use of the cwt. and qrs. If you had stated the original weight and the ultimate

Mr. *Stevenson*—continued.

ultimate weight simply in lbs. there would have been no difficulty, would there?—No difficulty at all. It would convey the same impression; you would see at a glance that the loss was so much.

2666. There is no question of system involved in it, so long as you stick to one unit, is there?—No, that was one of the practical inconveniences involving loss of time which are incident to our system of cwts., qrs., and lbs.

2667. If we followed the example of the Americans, and dropped the cwts., qrs., and stones, and talked only of lbs., you would avoid that difficulty?—Yes.

2668. That is to say, without altering our system of measurements?—Yes, quite so.

Sir *John Barran.*

2669. Did I correctly understand you to say that we are suffering in our foreign trade in connection with our present system of measurements?—Yes.

2670. There are at times, I suppose, difficulties in getting what are called replacements of worn-out parts?—Yes.

2671. Those, I think, as a rule, have to be obtained from the original makers?—Yes.

2672. In the case of our adopting the metric system, would it not be possible for the French or German engineers to supply parts which are now supplied by the English engineers, if it was the universal practice to use the metric system?—Yes, there is no doubt that a little trade would be lost in that way in replacing parts of machinery which had been made by English makers.

2673. We are now, I think, the largest exporters of engineering in the world; is not that so?—Yes, I suppose we still are.

2674. But I suppose we should gain, on the other hand, by being able to supply the worn-out parts of machines, engines, and boilers too, which were supplied by other nations?—Yes, the advantage would be far greater than the loss, in my opinion, incomparably greater, because, as I stated in my evidence-in-chief, the Germans and French get up illustrated catalogues, and everything is in metric measurement. The English makers may send out catalogues in English measures, but the mere fact of the former giving them some little trouble out there would determine the direction of the trade.

2675. That is in the initial stage?—Yes.

2676. But when the system has once got into order, then the Germans and French cannot supply the parts as readily as we could do if they were supplied under the metric system?—They generally go to the original maker for duplicate parts.

2677. There would be some considerable difficulty in the transition stage, no doubt?—There is no question about that.

2678. But, on the whole, as the trade of the world is enlarging and education is improving all over the world, do you think that we ought to go with the trade and the development?—Yes.

2679. And you do not believe, with Sir Frederick Bramwell, that because the average man has not to use his mind in arithmetical gymnastics it would be a great loss to him?—No.

2680. I suppose you would agree that, in consequence of the many physical improvements which have been made, and which have relieved mankind generally from very hard labour, men have not suffered in consequence of being relieved in that way; but I suppose you would say that they are able to use their strength in other departments, where they have been relieved by machinery and by the developments of science?—Yes, I think they have been relieved by machinery of a lot of unnecessary and disagreeable physical work, and I think that by the sensible system of weights and measures, which has been adopted by the majority of the civilised world, they would be relieved of a lot of unnecessary and disagreeable mental work.

*Chairman.*

2681. It has been stated by some people that we might advantageously adopt the decimal system, keeping our units, and that we should then have the advantage of the decimal system, and the advantage of not having to change our units, as opposed to adopting the metrical system; what do you say to that?—I should say that we should still be out of step with the rest of Europe, and should suffer the bumps and inconveniences which result from walking in a crowd when out of step.

2682. Do you think that is sufficient inducement to enable us to advocate the adoption of the metric system as compulsory, after a while?—Yes, I think it is in the interests of the country.

2683. Are there any other remarks that you wish to make?—I might say that perhaps it would be rather unpopular amongst our competitors abroad if we adopted it.

2684. That would be no disadvantage to the nation, though, would it?—No.

Mr. STUART UTTLEY, called in; and Examined.

*Chairman.*

2685. You are a member of the City Council of Sheffield, are you not?—Yes.

2686. And you have been so for the last eight years?—Yes.

2687. You are nominee gas director, a member of the management committee of the technical school from its inception, and also a member of the Firth College management committee as well?—Yes.

*Chairman*—continued.

2688. And which is, perhaps, more important to us for the information which you can give us, you are secretary of the Federated Trades Councils of Sheffield and District?—Yes.

2689. So that you have had a great deal of experience,

*Chairman*—continued.

experience, not only from the point of view of the City Council, but also from the point of view of the trades with regard to the matter we are discussing?—Yes.

2690. Have you heard the evidence of the two previous witnesses?—Yes.

2691. Are you able to give us, from your knowledge, the opinions of the working men of Sheffield and the public action which they have taken on this question of the decimal system?—Yes. Briefly, I may state that as far back as 1891 this question was brought before us.

2692. Brought before the Trades Council?—Brought before the Trades Council, which at that time represented between 70 and 80 industries, and the numbers represented upwards of 15,000, so that, practically, it covered all the skilled trades in the city. This question was brought before the council, and we decided that, being one of such great importance, we would devote an evening to its discussion. We discussed the matter, and it resulted in our inviting Mr. R. A. Hadfield (a gentleman you will be personally acquainted with, I daresay) to attend the meeting, and we fully went into the question. And I must say that I was very much pleased with the intelligent apprehension of the position by the members present. There appeared to be, especially among the engineers, a very strong desire to go fully into the matter, and many of them expressed themselves most decidedly from their knowledge, in favour of the decimal system being adopted as the national system. I may say that they also included coinage, but that matter is dropped for the present. Well, the result was that I, being a member of the Parliamentary Committee of the Trades Congress, was requested to draft a resolution, as secretary of the council, in order that it might be brought before the congress which was held at Newcastle that year, of which the honourable Member for Morpeth was chairman. I put a resolution down on the paper, but in consequence of press of business, and the great length of discussion on the eight hours question, it was relegated to the Parliamentary Committee. However, amendments were invited to any question which was relegated to the Parliamentary Committee, but no amendment was forthcoming on the decimal question.

2693. It was brought before the Parliamentary Committee?—It was brought before the Parliamentary Committee.

2694. And there a resolution was unanimously passed, was it?—They were empowered to deal with the matter amongst others. Mr. Tate, on behalf of the Standing Orders Committee, suggested "That the congress should now formally remit to the Committee for the ensuing year the whole of the resolutions that had not been decided upon, and that they should meet as early as possible to consider them, and, if possible, to put them into operation."

2695. They did meet?—Yes, and this was gone into, of course, but it stood over till the following year.

2696. Then what happened?—The following year I was instructed to draft a resolution similar to the one drafted in the previous year, and submit it to the congress, which was to be held at Glasgow; and on page 38 of the Congress Report you will find the resolution, which was moved by myself: "That in the opinion of this congress it is highly desirable that in the interests of the working classes, and of the general trade of the country, the decimal system of weights, measures, and coinage" (coinage was then also included) "shall be adopted in Great Britain and Ireland as a national system, and the Parliamentary Committee be instructed to promote legislation on this question."

2697. What do you mean by the decimal system; do you mean by that the metric system, because you must distinguish between a decimal system on our units and a decimal system on the units of a metre, such as is employed abroad?—In further explanation of that, I mean the adoption of the metric system.

2698. Did the people understand that; did your members understand that?—Yes. I do not need to read the remarks that were made.

2699. No, but I will ask you this: How was that resolution received?—The resolution was unanimously adopted.

2700. And by whom; what numbers?—The numbers represented at the Glasgow Congress, at which this was adopted, as you will find on page 59 of the report, were 495 delegates.

2701. And what did they represent?—The trades represented were 418. The total number represented was 1,219,934.

2702. Then, so far as that goes, the resolution was generally adopted by the delegates from upwards of a million members of trades' unions?—That is so. That was at the Glasgow Congress in the year 1892.

2703. Has anything been done since that?—Nothing so definite as that.

2704. And you consider that that was a very strong expression of opinion?—Yes. Nothing further was done by congress; but in our own council we have had the question up.

2705. Will you tell us now what happened in your own council?—The question has come up again this year in our own council. On April 5th, 1895, the Executive Council considered the matter, and they recommended the council to approve a resolution in favour of the adoption of the system. On May 11th, the council confirmed that; and I was also instructed to speak in the name of the council when before this Committee.

2706. You represent now the Federated Trades Council of Sheffield and district?—I do.

2707. Have they passed a resolution in favour of the adoption of the metric system?—Yes. I may also state that not only can I speak in reference to the opinions of the council, but I have also taken considerable trouble, knowing that I had to come up here, to obtain the opinions of persons who scientifically and practically have experience in this matter. I may state that our own City Council, on April 23rd, had brought before it the subject as the result of a letter from Mr. Johnson, secretary of the Decimal Association

*Chairman*—continued.

tion, enclosing a copy of a resolution passed by the Town Council of Leicester, who approve of the metric system of weights and measures; and it was resolved by the General Purposes and Parks Committee, to whom the subject had been referred by the General Council, "That this committee heartily approve the proposal to adopt the metric system of weights and measures in this country, and they learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter." This was proposed by Mr. George Senior, a manufacturer and member of the council, and seconded by Mr. Gamble, a well-known manufacturer also in the city, and was approved at the meeting. Those minutes were confirmed at a meeting of the council on the 8th May last.

2708. That would seem to show, on the one hand, from what you have told us, that not only the working men of the trades of Sheffield are in favour of it, but also the manufacturers, so far as you can judge?—Yes; I have also the opinion of our inspector of weights and measures; I do not know whether he has been here.

2709. I do not think it is necessary to take that. What we should like to know is, whether you have any other evidence with regard to the public; I mean the opinions of ordinary people, not skilled engineers or anything of that sort, but ordinary people dealing in articles?—Take the evidence of large manufacturers; would you regard that as evidence?

2710. We have had a good deal of that. What we should like to ask you is, whether you can give us any of that class of evidence to which I have referred?—In reference to the engineers, I had a conversation with Mr. Ellis, of the firm of John Brown & Company; he is the managing engineer, and he is along with me on the Technical School Management Committee. I had a conversation with him on this question, and he said he found that workmen could readily take hold of the millimetre, and he had worked direct himself along with English workmen with Spanish plans and sections, without any mistake, in the case of 50 large forgings. He said that under the old system, having to work to 16ths and 32nds, in fine work there were two possibilities of error: there was a possibility of error in transcribing in the drawing office, and then, again, in working it out in the workshop; and he was strongly of opinion that it would be of very great advantage to himself as a manufacturer, and also to the workmen as a class, if this system was adopted as the national system. He said there might be a little difficulty in reference to steel mixtures; but, as a rule, those were controlled in the laboratory, and he was very strongly of opinion that it ought to be commenced in the schools at once as the national system of education. That is the general opinion of the great bulk, I may say the whole, of the intelligent artizans that I have conversed with. They feel this: that our system of weights and measures is an anomaly; that it occupies a great deal of time in the teaching; and that when they have, as some of them have had, to go abroad to do particular work they have found themselves

*Chairman*—continued.

at very great disadvantage in consequence of the difference in the system of working abroad; and the result has been occasionally that men who have been credited with being highly skilled workmen, and men that could be relied upon for fixing and preparing important machinery, have been placed at a disadvantage alongside foreign workmen; and there is certainly a strong feeling on the part of that class of workmen, at any rate, that there should be an opportunity given to their children as speedily as possible to secure a thorough knowledge of the metric system, and that it should be included in the Education Code.

2711. Do you think, as representing your trade union, that they would like to see the system made first of all optional, and then afterwards obligatory?—All those that I have conversed with are of opinion that the sooner it is commenced to be taught in the schools the better, and after there has been a fair opportunity of its being mastered that it should be obligatory.

2712. That it should be made compulsory?—Yes, eventually. Of course, the question has cropped up in the discussion as to any hardship that would be imposed upon small dealers, small shopkeepers, in the matter of changing their weights and that sort of thing; but that has been worked out, and we have come to the conclusion that it would not be a very great charge upon them. It is calculated, I suppose, that in the case of small shopkeepers it would not cost more than something like 30*s.* to replace their set of weights and scales and those things, and that would be the bulk of the expense; that is, so far as the workmen look at it, and as their knowledge goes. Of course, a number of these workmen are engaged themselves in small retail trades, and whilst, perhaps, they do not understand all the technicalities and all the outcomes of these questions, yet still, on the whole, they are pretty sound on the broad principles, I am disposed to think, and are as fairly able to judge as most nationalities.

2713. Do you think they would be able to appreciate the simplicity if it is much more simple?—Yes, I quite believe that; and, so far as their being able to adapt themselves to it, I am sure they could.

2714. You do not think they are more stupid than in any other country in the world?—They are more determinate about things, often. I do not say we are more stupid; I think surely we can manage things that affect our interest as quickly as most people. I do not think we are given to change for the sake of change.

2715. But we can see when it is to our advantage to change?—Yes; I believe when it is once seen that a thing is to our advantage they are prepared to go for it.

2716. What other remarks do you wish to make?—There is just one other point I should like to mention, and that is this: that the working men cannot understand how it is we have such a stupid system that will allow, say, a bushel of potatoes in Cornwall to mean 224 lbs. and a bushel of potatoes in Nottingham to mean 84 lbs., and then that wholesale purchasers buy by a certain

*Chairman*—continued.

certain weight and sell by another weight. All those things are such anomalies that we cannot understand them.

2717. You think all those anomalies ought to be swept away if possible?—Yes; we think they are exceedingly stupid and out of date.

2718. Have you got anything to say on the subject of community of interest?—As to community of interest, I have anticipated that in some measure. What I mean is this: that supposing by our adhering to the old system, we lose trade, the manufacturers suffer, and so do the workmen. One cannot be affected without the other in a greater or less degree.

2719. You mean that if our present system should be proved to affect our foreign trade, the workmen would suffer, and therefore they would desire to see the thing altered?—Yes, certainly; because we have had examples quoted where orders have been lost in consequence of the difficulty entailed upon the foreigner in making his calculations on our system, which he was not accustomed to; and of course every order lost to British trade is lost to the workers; so that there is a community of interest in trying to secure the very best possible arrangement.

Mr. *Stevenson.*

2720. Has the point been clearly understood; there seems to have been no discussion at any of those trades councils or meetings that you have mentioned on the subject; no one has argued on the opposite side, has he?—No; no one has argued on the opposite side in an antagonistic form, simply because when the matter was explained, it appeared to be so expedient to them; that it was a proposed transition from something which was difficult and entailed more labour in the learning, and was difficult in the practice, to something which proposed to be much easier both in its acquisition and its adaptation.

2721. But one of the difficulties mentioned was the difficulty in working in fine machinery with a 16th and a 32nd of an inch?—Yes.

2722. Was it understood that that could be got over by working to 100ths of an inch, and 1,000ths, as is done in a great many of the best engineering shops in the country?—I mentioned that difficulty as the opinion of Mr. Ellis, who is a practical engineer, and is at the head of one of the largest firms in the City.

2723. Does he use the inch divided into decimals of hundreds and thousands?—I do not know how he works particularly.

2724. Was it brought before these meetings that, in order to obtain this metric system, they must put all the foot rules into the fire, and no longer talk of feet and inches?—It was clearly understood that it would be the introduction of a new system that would be more ready and thorough in its application; and, so far as regards the old system, it was the natural conclusion that the old system would have to disappear if the new one was introduced. I take it that they would have it in their minds that the introduction of the metric system would mean the disbanding and discarding of the old one.

Mr. *Stevenson*—continued.

2725. But the matter does not seem to have been argued?—No.

2726. Then with regard to what someone called the stupid system of selling potatoes by different measures and different standards of weight, did they quite understand that those were quite contrary to the law now, mere matters of custom, and that it is not required to introduce the metric system to make the different markets of this country sell potatoes with the same number of pounds in each case?—But in our markets to-day we have the different standards. They buy 16 lbs., in some cases, to the peck, and in other cases only 4, or 6, or 8 lbs., according to the character of the vegetable they purchase, which is most confusing.

2727. Does it require, to introduce the metric system, a new language altogether, to get quit of those anomalies?—I take it that if the metric system were introduced the others would be disbanded and done away with, and it would be generally understood that the one system would be adopted.

2728. But if people will not make one uniform system of their existing units, will it not be very difficult to persuade them to adopt an entirely new system altogether, with no longer pounds, ounces, feet, or inches?—If it were illegal to perform a transaction in any other way except by the metric system, I take it that they would adopt it all round.

2729. In order to avoid the penalties of the law?—Yes, that is the only way, I take it, that it could be generally adopted. People will generally, according to custom and prejudice, cling to them, and I daresay those in Cornwall would persuade themselves that they would be defrauded if they dealt in any other way; and the same with those in Nottingham.

2730. Would those people who object to any alteration of the present bushel standard take kindly to a new foreign system altogether, those Cornish people, say?—I take it that it is only a question, with everyone, of a little experience; and if the system proves in working better than the old one they will take to it naturally.

2731. Will they give it a trial, being so wedded to the old system?—They would be compelled if it is the law.

2732. That is to say, that by fine and imprisonment you would enforce it on all people?—Yes, if a market inspector came round and it was understood that they were under penalties if they sold by any other system, they would fall into it the next market day.

Sir *Edward Hill.*

2733. You have given this matter some considerable study, and have come to the conclusion that our present system is not good for the trade and commerce of the country?—Yes, I do not think it is. I think anything which entails extra labour upon a customer when you are on the verge of getting an order, is likely rather to set him against you than to bring him over to your side.

2734. And with your extensive knowledge of the working classes, do you not see any practical difficulty in the introduction of the

Sir *Edward Hill*—continued.

metric system, which is now used all over the world?—I think it would require a very little time, perhaps three or four years; and if people's minds were becoming prepared for it, we should find that there would not be any difficulty. I think, seeing that it has proved itself in other countries to be easy of adaptation, in this country we should fall in with it quite as readily, and deal with it quite as well as they have done in foreign countries.

2735. And you think that it would be an advantage to the small purchaser that he should know exactly what it was he was buying if he bought a certain measure of potatoes, or whatever it might be?—Certainly.

2736. And although there might be some little difficulty when it was first introduced, you believe that that would be easily got over after a little experience?—I believe so.

2737. And that is the universal opinion of the working men whom you have come in contact with who have considered the subject?—Yes; there has been no objection raised.

Mr. *Wrightson.*

2738. You do not think the fact that you mentioned, about the scales and measures having to be replaced, would cause much prejudice on the part of shopkeepers?—It would cause a little; you will always find a little trouble when a man has to spend half-a-crown or a shilling.

2739. Would not that extra cost be much more, do you think, than you mentioned; 30*s.* I think it was?—I do not think it would in the case of small shopkeepers: larger shopkeepers would, of course, be better able to afford it; but they would soon fall in with it when it was likely to become the general custom of the kingdom.

*Chairman.*

2740. Of course the scales are just as true for the metric system as for the ordinary system, excepting springs, steelyards, and these tables at which the steelyard is used?—Yes.

2741. And there would not be any great difficulty in accommodating those; you do not require to alter the system of leverage, but simply the measuring apparatus; is not that so?—I have no doubt manufacturers of weights and scales and measures would see their way to adapt them.

*Chairman*—continued.

Sir *John Barran.*

2742. But do not you think that a small shopkeeper who had to spend 15*s.* to 30*s.* would grumble at having to lay out even a small sum of money like that; very poor people, living from hand to mouth daily; and there are a great many of them, are there not, in Sheffield?—A few.

2743. They would grumble a little at first, would they not?—Yes, I think there would be a little grumbling; I do not disguise the fact.

*Chairman.*

2744. Possibly there might be some assistance given to them, might there not?—I think in cases where there are very small people in a small way of business, and they cannot afford it, it would be an easy matter to meet them in some way.

Mr. *Wrightson.*

2745. Do you mean for the municipalities to meet them and help them?—I cannot say exactly by whom, but they might be met.

Sir *Edward Hill.*

2746. If they were in a very small way of business they would not want very many weights, would they?—No; but a sovereign is a lot to a person that does but little. I think that is the most difficult point in the question.

*Chairman.*

2747. Is there any other matter that you wish to bring before the Committee?—I have had lent to me a book which I should like to hand in, just to show that some of our manufacturers see the importance of having tables. One of our manufacturers has actually gone to the expense and trouble of preparing a book for his own use, as a firm.

Mr. *Stevenson.*

2748. Is that on the equivalents of the two systems?—Yes; it is rather an interesting thing (*handing in the same*).

*Tuesday, 25th June* 1895.

MEMBERS PRESENT:

| | |
|---|---|
| Mr. Alban Gibbs. | Sir Albert Rollit. |
| Mr. Godson. | Sir Henry Roscoe. |
| Sir Edward Hill. | Mr. James Stevenson. |
| Sir Samuel Montagu. | Mr. Webster. |
| Mr. Jasper More. | Mr. Wrightson. |

SIR HENRY ROSCOE, IN THE CHAIR.

Mr. THOMAS EGLESTON, PH.D., LL.D., called in; and Examined.

*Chairman.*

2749. I BELIEVE you are Chairman of the Meteorological Society of the United States?—Yes; I am Vice President of the Society and Chairman of their Committee on Gauges.

2750. Is that a Government Society?—No, I have no Government position.

2751. And you have paid considerable attention yourself to the question of the position of the metrical system in the States?—Yes; since 1860.

2752. Would you kindly tell us what is the legal position of the metrical system in the States; is it adopted in the States, or is it not?—It was adopted by the United States between 1865 and 1870, but there was no appropriation made for carrying it out, and consequently it failed. But since that time all invoices by the Custom Houses have been made out in the two systems.

2753. Will you kindly explain to the Committee what you mean when you state that no appropriation has been made. Do you mean that no grant has been made?—No grant of money has been made for carrying it out.

2754. But, as I understand, the system has been adopted?—Yes, the system has been adopted and is legal, but not compulsory; because there is no appropriation of funds made for carrying it out.

2755. But anybody who pleases may now use the metre and kilogramme in carrying on any business in the States?—Yes; and it has been so for 30 years at least.

2756. And I understand that invoices in the metric system are received at all the Custom Houses?—Yes.

2757. Therefore, of course, those nations that deal at home in the metric system do not need to change their invoices when they come to the States?—No.

2758. Is that a considerable amount, do you know?—Yes; it is a large amount in the New York Custom House. I cannot speak for the others; but in the New York Custom House it is a very considerable amount.

2759. You tell us that the metric system of weights and measures is legalised; is it at all in use in trade?—It is in use very considerably in the State of Utah, which has put it into its Constitution, so that in the State of Utah there is no legal transaction which is not in the metric system, while between the State of Utah and other States both systems are legal.

*Chairman*—continued.

2760. Does the question of the adoption of any particular system of weights and measures depend upon the State, or is it a Federal matter with you?—It is a Federal matter; but this is a very peculiar example, the State of Utah wishing to have it introduced, and using its influence for the purpose.

2761. And its influence has obtained to such an extent with the Federal Government that they got permission to use it?—They do use it. They have to use it, in fact, in the State of Utah.

2762. Is it a fact that the legal definition of weights and measures in the United States is in the metric system?—Yes; it is the only legal definition there is. The yard is so much of a metre and the pound is so much of a kilogramme.

2763. You have the standard yard, of course?—Yes.

2764. And that standard yard is copied from the standard yard in this country, is it not?—Yes.

2765. In what way is it defined as a fraction of the metre?—The United States, when it adopted the metric system, defined the yard as such a fraction of the metre, and that is the only definition ever authorised by Congress.

2766. Then all that you require in your own country to enable you to use the metric system is a grant of money for the conversion of the present weights and measures into the metric system?—I hardly think that, because it is so long since this system was adopted by the United States that I think the law would be considered as null, and it would have to be re-enacted. It is legal, but not compulsory.

2767. Am I right also in saying that in coining some of your coins you have had regard to the metric system?—Yes; immediately after its adoption the five cents nickel coin was made of a certain metric weight and a certain metric measure. That coin was also remarkable, because it is the first time that the United States has recognised the Deity in putting "In God we trust" on it.

2768. At the present time your five cent piece has a definite weight of grammes and a definite measure of millimetres, has it?—I think not. I think after five or six years that was abandoned. I do not think the present five cent coin has a

*Chairman*—continued.

metrical measurement. I am not sure, however, about that.

2769. But it was so at one time?—Yes.

2770. We have heard that a Committee has been appointed by the House of Representatives for the purpose of investigating this matter. Can you tell us anything with regard to that?—The present Postmaster General, when he was Chairman of the House, had a resolution passed by the House (there was not time to pass it by the Senate), appointing the Secretary of the Treasury, the Director of the Mint, and the Superintendent of the Coast Survey, to be a Committee to report to the next Congress, which meets in December of this year, about the advisability of making the whole system compulsory in the United States.

2771. Your present Postmaster General was Speaker of the House?—He was Speaker of the House at that time, and he is an earnest advocate of the metric system.

2772. I do not know whether your Committee sat in public or private, or whether any public notice was taken of their sittings?—I think not; I think that the Committee would simply call for information. The reporters could be present, but I think no information has been published upon it, or it would have reached me if there had been any.

2773. There would have been no difficulty in obtaining that?—Not the least.

2774. What have you to say with regard to the opinion of other competent authorities in the United States?—I think that the metric system would have been adopted in the United States except for the absurd statements of its friends, who stated that certain portions of school life would be made more useful; that the insane asylums would have fewer occupants, and so forth, which is an absurdity, of course.

2775. You think those sentiments have been exaggerated, and have acted prejudicially to the advancement of the object?—Enormously.

2776. Still, I suppose you believe that school time is considerably wasted, or, at any rate, might be better spent, if the metric system were used instead of all these complicated tables?—There is no doubt about it, and it is being introduced and taught in every good school, I think, in the United States.

2777. Is it taught practically; do the scholars see the length of the metre?—In almost all the good schools there is either an example of metric measures or else a picture of them upon the walls of the school.

2778. Is there any opposition at all, do you think, in your country to the adoption of that as a compulsory measure?—The opposition there will be, will come, from the manufacturers of large machines; but I do not think the manufacturers as a whole will object to it, for the reason that they are giving up very largely what are known as arbitrary gauges, and using diameters and thicknesses in either decimal of an inch or metric measures.

2779. You, I believe (or your Committee), have been instrumental in issuing a decimal gauge for the purpose?—Yes; the American Society of Mechanical Engineers made me chairman of a committee, and we worked for several years for the introduction of the decimal gauge, because it was found that the dividing of an inch into sixteenths was not as convenient as dividing it into tenths.

2780. By the decimal system you mean the metric decimal system?—No, the decimal gauge is a gauge in inches. The Metrological Society made me chairman of a committee for the introduction of a metric gauge, and the tables I have given you show the difference between the two guages to be altogether inconsiderable; so that there really would be no great change. It has been found that it is not practicable in machine shops to use the micrometer screw; they must have a notch gauge of some kind; and so by these two sets of engineers there have been proposed one the decimal and the other a metric gauge for the convenience of manufacturers. The decimal gauge was adopted by the American Society of Mechanical Engineers, the American Master Mechanics' Railway Association, and by a very large number of engineering societies in the United States. A metric gauge has just been proposed.

2781. We have been informed that in the United States of America all the pharmaceutical preparations are now by law made according to the metric system. Do you know anything about that?—I cannot give you any knowledge on that subject. I think it is very likely, but I am not aware of it.

2782. Are there any other remarks that you would like to make with regard to the operation of the metric system in the States?—I do not remember anything that I think would be interesting to the Committee; but I should be glad to answer any other questions.

2783. I will only ask you this: Do you think that the adoption of the metric system would be favourable to the external trade of the United States in trading with countries which have adopted already the metric system?—I am very certain it would.

2784. Do you hear any complaints by your United States traders in those countries to the effect that they are obliged to use the yard and the pound instead of the metre and the gramme?—Yes; I hear a great deal of that from South America, and from Europe as well.

2785. Then the same sort of feeling is observed in your country, as we have had evidence of here?—I am quite certain it is so. I am sure that the trade with the countries using the metric system would be greatly facilitated if the metric system were adopted, and that the use of the inch is an impediment to it.

2786. Do you think that on the part of ordinary people, ordinary shopkeepers and small retail traders, there would be great difficulty in your country in accepting the metric system?—No; because the largest manufacturers of weights and measures in the United States have been in the habit for years of giving both systems. I have for 20 years carried a tape in my pocket, with both systems on it; feet and inches on one side, and metres on the other side; and some of the largest manufacturers of weighing machines have put both weights upon the graduation of their machines.

2787. Have you good hope, then, that before very long there will be the change that you are here to advocate?—I, of course, hope so; but whether

*Chairman*—continued.

whether those hopes are well-grounded, no one can tell; it depends largely with us whether there is any politics in it.

2788. That is not so, only in your country?—Unfortunately.

Sir *Samuel Montagu.*

2789. I would like to ask you two questions. You told us that the State of Utah had introduced the metric system; is it compulsory in Utah?—It would be compulsory there, without being compulsory outside Utah.

2790. But in Utah, is it compulsory to the exclusion of the pound and the yard?—I should think so, because otherwise they would not put it into the Constitution, since it is already legal in all the States of the United States.

2791. Did I rightly understand you that the yard and pound do not obtain now in Utah?—They would not for State purposes; if the State was to make a contract it would make it in the metric system.

2792. But would the ordinary traders in Utah still use the English weights and measures?—If they chose.

2793. You mention to us that imports reaching the United States were invoiced in the metric system; is that the case with exports to any of the countries that use the metric system; are they invoiced in the metric system?—I cannot say; I should think they would be, but I cannot tell you absolutely whether it is so or not. But that is a question I could easily answer, because I have plenty of friends making out those invoices, and I could easily get the information for you if you wish it.

Mr. *Webster.*

2794. I think you said it was legal either to use the metric system or the old system in America?—Yes.

2795. Can you tell the Committee what proportion of trades use the metric system, as a rule, and what proportion use the old system; have you any idea of that?—I cannot tell you that. It would require careful examination at the Custom House. But a considerable portion use the metric system, I know.

2796. In what special trades?—Anything that comes from metric countries, or goes to metric countries, would be in metrical measures; but I cannot specify any particular trade. The commerce between those countries where the metric system is in use would be in metrical measures.

2797. You have a considerable trade with South America, have you not?—Yes, a very large trade.

2798. I suppose that in a great deal of that trade the dealers use the metric system?—I think there is no doubt about it at all.

2799. Have you much trade with France?—A great deal of trade with France.

2800. I suppose that the traders to France use the metric system also?—Yes.

2801. And from France?—Yes.

2802. Do you think that it would be popular in the States to make it compulsory?—I do not know; I think if anything was made compulsory there would be opposition to it.

Sir *Edward Hill.*

2803. I think I understood your evidence to be to this effect: that the result of your 35 years' study of the question of the metric system leads you to feel confident that it is the best system that we can have, and that its introduction would be a great assistance to commerce in general throughout the world?—Yes, and a great boon to mankind.

Mr. *Jasper More.*

2804. Who are the class of people that use it; are they mostly the scientific classes?—The educated and scientific classes in general use it almost entirely.

2805. Not the retail traders?—No, I do not think any retail dealers use it at all.

2806. Have you had the same difficulty that we have in this country with respect to multiplicity of weights and measures for grain?—Yes. When I first began to study the system of weights and measures there were 60 different bushels in the State of Pennsylvania alone. The bushel now is defined with us by weight.

2807. Were they measures?—They were measures.

2808. Are they weights now?—Yes, they are now weights, so that there is but one bushel.

2809. And there is no longer a measure of capacity?—It is in a certain sense a measure of capacity, but it is defined by weight.

2810. You do not remember how many pounds there are to the bushel?—No.

2811. But is it the same number of pounds for all cereals; you do not know, perhaps?—That I do not remember; I could not answer that question.

2812. Your method of selling wheat is different from ours here, I think?—We sell it by weight entirely; the bushel is so much by weight.

2813. Are the samples delivered in the market?—Yes.

2814. And now they are sold by this bushel of weight?—Yes, otherwise it would be unfair, seeing that the wheat comes from different soils, with a different capacity of weight.

2815. But wheat is sold by the cental, is it not?—Yes, but it is always weighed; it is always so many pounds by weight.

2816. There is no necessity to divide it into bushels?—No necessity.

2817. You might as well do away with the bushel altogether?—Yes.

2818. What is the bushel used for; to quote the price?—Yes.

2819. Instead of the cental?—No, I think it is always quoted at so much per bushel; that is my impression.

2820. I do not know whether you are aware that we had a Committee on the subject here in which we considered, amongst other things, whether we could advise doing away with the bushel entirely. Now, although you do not sell by bushel you retain it; that is a remarkable fact. I am sorry that we had not you as a witness before that Committee?—I should have been very glad to have been of any service to you.

Mr. *Stevenson.*

2821. I presume that a shopkeeper, a draper, in America does not use the metre instead of the yard

Mr. *Stevenson*—continued.

yard in selling cloth over the counter?—I have seen them use the yard, because that is what everybody uses.

2822. Then, when you said that the metric system is optional, how far is it optional if it is not in practice?—If a draper chose to sell to a Frenchman, and the Frenchman wanted so many metres, he would sell to him by the metre.

2823. But in America, in actual practice, they use the yard?—They use the yard.

Mr. *Godson.*

2824. I gather from your evidence that in Utah, for internal purposes, the only legal standard is the metric standard?—Yes.

2825. But for external purposes they use anything they please?—Yes.

2826. When they deal with countries using the metric system they use the metric system, and when they deal with countries using the English fashion they use the English fashion?—Yes.

## Mr. JAMES STEVENSON (a Member of the Committee), Examined.

*Chairman.*

2827. As a Member of this House, and having had great experience in commercial matters also, you have considered this question, I think, very much?—Yes. I have been a chemical manufacturer for 50 years, and I am a member of the Society of Chemical Industry and a Fellow of the Institute of Chemistry.

2828. Will you kindly tell us what your opinions are with regard to this matter?—Since I have given attention to this matter, beginning with a very strong inclination in favour of our decimal system, I have been and am still anxious that facilities should be given for decimal calculation and decimal measurements, on account of the advantages they possess in many respects; but I feel strongly against any disturbance of our existing units. It appears to me that this question has been argued perhaps too much as a trade question, a buying and selling question. It appears to me that it is a question of the English language. These units of weights and measures are part of our language, with which we express in words our mental conception of size and distance, and to render them illegal in trade would cause very great confusion in actual life. It may seem a little *infra dig.* to use the illustrations that I propose to do; but supposing that the metric system was adopted and we were no longer to speak of miles, but of kilometres, the cab fares of London would cause a good deal of confusion; it would involve a complete change in all the tables of radius that we consult to know how much we ought to pay our cabmen. I have, since the Committee sat, been getting, as all Members do, a large number of returns made to Parliament, and I could not help looking at them with rather a critical eye from the point of view before us. I have here the last Army Return, and on page 65 of it we are given the heights of non-commissioned officers and men of the army and militia and their chest measurements; they are tabulated according to the different branches of the service, in columns of men under 5 feet 5 and men of 6 feet and upwards. They are all put in in feet and inches. If we were compelled to adopt the metric system for trade, are we still to keep it for statistical information? I find that under the column from 5 feet 5 inches to 5 feet 6 inches, figures which are quite familiar to us, we should have to face the figures 1·524 metres; and in the last column but one the tall men, who are called here 5 feet 11 inches to 6 feet, should go in a similar return (and probably would in France) as 1·829 metres. That is an illustration of the difficulty and confusion which

*Chairman*—continued.

it seems to me would arise in ordinary conversation by the adoption of this system. It may be a little ridiculous, but one of the other things that has come under my hand was a bill for the sale of harness horses. I need not say that these horses are all set forth for sale at so many hands high. If we are no longer to speak of inches what meaning will attach, when people have forgotten their inches, to the height of a horse so many hands? I have calculated out what one or two would be under the new language, and I find that one horse (and one is as good as many), a roan mare, 14 hands 3 inches high, would in a similar document of this kind be put up as 1·4986 metres, which, I am afraid, to the horse-dealer would not be quite so intelligible.

Sir *Samuel Montagu.*

2829. He would say one and a-half metres, without turning a hair?—That is a coincidence that does not often happen. A grey gelding 16 hands and ½-inch would appear as 1·7529 metres; ·75 is also ¾; that will come sometimes. However, those are two that I have taken quite at random. The loss of labour by rendering unintelligible all the maps of the Ordnance Survey, which has been going on in this country for a hundred years, all of which are scaled to miles, of so many feet or inches to a mile, seems to me to be overwhelming. If we are to change all those maps, and if we are to use nothing but metres in trade, I do not see how we can keep on using anything but metres in agricultural statistics and in land measurements. Then, I had given to me the other day an annual volume of agricultural statistics which sets forth the prices of grain of every kind for so many years past, oats and barley and wheat; it sets forth also the produce per acre in different seasons of those different kinds of grain, carrying them back for a great many years. If in future statistics those are to be rendered in the language of the metric system, I see that a great break of continuity from the present system, and considerable confusion would necessarily arise; and although witnesses before this Committee have stated pretty freely that it would only take three or four years for the transition period, you cannot change the language and thoughts of the country in, perhaps, as many generations; and agriculturists would still continue to talk of a crop of turnips as so many tons to the acre, and would not be able to forget it, or to express an idea which is clear to their minds

in

Sir *Samuel Montagu*—continued.

in the language of the metric system. I am unwilling to go at length into this.

I will take the next point, which is the alleged incongruity of the Imperial system, and the "anomalous" and "incongruous" and other strong adjectives which have been used as to this system. With regard to that, I would rather quote a sentence from the 6th paragraph of the Second Report of the Standards Commission, of which Sir George Airey, the late Astronomer Royal, was at the head, and who reported in 1869 as follows: "In the statements introductory to the proposals for new systems in France, North Germany, and India, very great stress is laid on the discordance in the fundamental units of their customary weights and measures as adopted in different districts of the same empire. These reasons have no force in Great Britain and Ireland, throughout which, whatever difference may prevail as to the multiples in local use, the fundamental units, namely, the yard, the pound, the gallon, are strictly the same; based upon national standards, which are constructed with the utmost skill and care, and supported by a system of inspection which, though chargeable with imperfections, is, on the whole, efficient."

2830. May I ask you, are you in favour of retaining both the avoirdupois and troy pound?—The troy pound has been abolished, and has been illegal for some time. It is the troy ounce that is legal.

2831. The troy weight, I mean?—The troy ounce is practically the unit for precious metals; and it seems to me extremely convenient to have a very small unit for gold and silver, to express what you see every day in the mining reports of a new reef of gold in South Africa, where they have extracted 2 ounces of gold to a ton of ore. I think there is a convenience in expressing a valuable article in a small unit, inasmuch as it is contained in a very large quantity.

2832. Is it not also stated in percentages?—No.

2832*. Not the analysis of ore stated as a percentage?—No; one never sees the percentage. In selling argentiferous lead on the Tyne, the lead is so much per ton, and the silver in the lead is so much per troy ounce.

2833. Then I take it you are satisfied with having the two kinds of weights, the avoirdupois and the troy weight?—I am content with them. I should not begin with them; but I think it is a great advantage. I think the ambition of the metric system is to have a decimal relation between the very smallest weight and your very largest; between the micrometer and the microscopic, and the distance of the heavenly bodies. There is no necessary reason why these should be decimally related to each other.

2834. But I understand that you would prefer to decimalise our existing weights?—Yes.

2835. You would be in favour of that?—Optionally; and I am going to show how natural in practice it would be to do that.

2836. And you spoke of the difficulty with cabs; do you know that in Paris they have a certain charge for a course; and if London were divided into sections, would it not be very much better than the present mode of charge?—I think the present mode must stand on its own merits. I should be sorry to alter the present mode merely to make the metric system more easily introduced.

2837. Could not that difficulty be got over by having a certain radius like we have now from Charing Cross, only, say, two miles instead of four, with a charge for a course between, as they have in other countries?—We must still be able to charge something per mile.

2838. You spoke of the difficulty with regard to the hands of horses; does it not strike you as a very good coincidence that the metre is about 10 hands high?—It is so.

2839. And that the measurement of horses was never intended to be so exact as you state, that as you do not go into three places of decimals, you would not go into the tenth of a hand?—I said that I did not put the amount of hands as very serious, but that it is the confusion of language to stable boys and ostlers that would arise.

2840. Do you not consider that the farmer, who now talks of so many tons of turnips, could also talk of so many thousand kilos of turnips, a thousand kilos being almost identical with a ton?—That is so; but then the acres would be the difficulty.

2841. But, as regards all these difficulties, has not Germany passed through them all, and yet survived?—I cannot deny that; but I do not see why, when there is no necessity for it, we should be subjected to what must have been the inconvenience that Germany had to pass through. We have evidence before us that in Germany there was a different foot-rule for every State in Germany.

2842. Have you heard any expression of regret from Germans of position that they have gone through those difficulties?—The voiceless multitude who suffer inconvenience are not heard in those matters.

*Chairman.*

2843. Will you proceed now with your evidence?—We have had a great deal of evidence before us as to trade with the metric countries, and we have been given a number of reports from the consuls intended to bring out the idea that if we had the metric system, the same language of weights and measures, it would facilitate trade. It is a mere truism, of course, to say that if all countries had the same language there would not be any difficulty in trade. The question is as to the remedy. In looking at these reports I will take one from Rouen, and just quote a single line of it. It says: "We have seen the confusion of French traders when they see a trade prospectus or circular drawn up on the British system." The remedy for that is that they should translate their trade circulars into the language of the country that they are trading with. And it is the same thing over and over again. I need not quote many more of these reports. The consul for Malaga says, for instance: "The German merchants have the preference if they send out their price list in prices of Spanish currency, and the rates according to the metric system, whereas the British merchant always sends his made out according to the English weights and currency,"

*Chairman*—continued.

currency." We do not require to alter our weights and measures at home in order to meet that.

2844. The difficulty was not that they could not do it, but that it would cost them money, and that the nations trading with one another, who are on the same basis, are at an advantage, because our traders have to pay money for the change?—If a man is dealing with a country with a different language, he must lay himself out to some expense to get trade. With regard to Italy, the ambassador, Sir Clare Ford, mentioned that "although every vendor is now required to be possessed of metric weights and measures, yet the people, both in the towns and in the country, still make use of the numerous old weights and measures, especially the libbra, in transactions between each other." I merely mention that to suggest that you may get a law passed, but the practice of the country may be entirely against it. In Genoa the consul says: "Having received inquiries from the new Decimal Association" (these are the gentlemen who have come before us), "I may mention that, as stated in my reply, no cases had been brought to my knowledge, during the short period of my residence here, in which English manufacturers or exporters had suffered by reason of purchasers here finding difficulty in understanding quotations in English weights and measures and currency; but I am fully of opinion that, in offering British goods abroad, it is very desirable that quotations should be given in weights, measures, and currency assimilated to those of the country in which they are proposed to be sold." So we have another proof that it is the negligence and slackness of our traders which is a bar to trade, not that we have not the metric system. The consul at Brest (these are consular papers that have come in in the last few days) says: "As very few of the merchants and traders in this region understand English, the circulars and price lists in that language sent out by certain of our enterprising manufacturers and exporters fall on rather dead soil. Some of these lists and prospectuses are distributed where they may be likely to do good, and others are always open to inspection at the consulate; but I think it would be to the advantage of our manufacturers, especially those of agricultural implements, hardware, and fancy articles, if their price lists, &c., were printed in French, so that they might be understood by all. Some inquiries made in shops have come under my own observation concerning some of the last-named goods and their use, which the shopkeeper could not reply to satisfactorily, not understanding himself the description and instructions which were in English," showing that if English traders would only use the French language in their weights and measures they would get trade which they miss at present. Then the consul at Trieste (this came out the other day) says: "In consequence of inquiries from an association in England for promoting decimal coinage and the metrical system for weights and measures, the consul endeavoured to obtain information as to whether the adoption of the metrical system in the United Kingdom would increase its commerce with and through Trieste. The result of these inquiries was somewhat unexpected." And then he goes on in one or two paragraphs, in which he says that it really was not necessary to do any more than to adapt our circular to the language of the country, and he says that the German manufacturers are translating their trade circulars into Italian for the benefit of the people, the inhabitants of Italy. Then there is a very extensive machine-maker in this country (I dare say you know his name), the firm of Richards, of Broadheath, Manchester, who have published one of their trade lists and illustrated catalogues in the French language, precisely similar to what they publish in English; they have an agent in France who takes care to get business in that way. And another firm of manufacturers of files in Sheffield, Messrs. Jonas and Colver; I wrote to them, as their name was mentioned here. They say: "Our representatives abroad obtain orders in measurements, weights, and coinage required by customers, which we adhere to in the execution of the same." I need not multiply instances, but there is one report from Brazil that I should like to mention. The consul at Pernambuco says: "I regret to report a want of enterprise during the last five years on the part of British manufacturers of machinery in regard to cane mills and sugar manufacture. Not only have the French been much more active, but they are more *au fait* with modern improvements; they are always well represented, and are on the spot." He says that Manchester, Dundee, and Belfast merchants are now sending commercial travellers, who call frequently at the ports and keep in touch with the requirements of the market. So that that is an instance of both ways. I think that is all I need say in dealing with the metrical countries. Now, with regard to English-speaking countries, we were told that a proposal has been made some years ago to use the kilogramme as the standard of weight throughout India. I was not surprised (I knew it at the time), when that proposal was made, that many London merchants, when they heard that it was practically proposed to make India a foreign country with regard to the language of weights and measures, protested against it, and the proposal was withdrawn.

2845. We did not hear that; that was not the statement?—No, I am telling you that. I knew it of my only knowledge at the time. And I may also say that since then, in 1889, when Lord Cross was Secretary of State for India, the English yard, foot, and inch were adopted as the standard measures of length for India, and copies were provided in different parts of the country for the purpose.

With regard to many countries, for imports as well as exports, I hold in my hand a circular from a French manufacturer of French confectionery, who sends his travellers round to sell to wholesale grocers (and one of them gave me this circular), and I find that he makes his packages in English pounds, and quotes them in English money, so that he has adapted himself to the language of weights and currency of his English customers, just as, of course, our manufacturers ought to do by adapting themselves to the language of weights and currency of their

*Chairman*—continued.

their foreign customers. Then, with regard to America, consular reports have been coming in from the different consuls in the United States of America, which show that the Americans use in their trade reports our own Imperial measures. I have a table here of the price of cereals per bushel in the United States for the last 24 years: Indian corn, wheat, rye, oats, barley, all in the Imperial bushel.

Mr. *Jasper More.*

2846. Was that before it was made the measure of weight?—I cannot discriminate; that the report comes down to the year 1892. There are also figures showing the average yield per acre in bushels and the value in dollars and cents, and the average yield per acre in bushels of wheat. These statistics would be unintelligible on this side of the Atlantic as ours would be on their side if either of these two countries adopted the French system of measuring land and weighing the crop.

*Chairman.*

2847. But if both adopted it, there would not be the same difficulty?—That is a matter of course, if both adopted it simultaneously, which seems to me almost beyond any possibility. Then I find (this is a report from Chicago) statistics of the shipment, into the United Kingdom from the United States, of bacon, ham, pork, and lard; I only bring it forward to show that the quantities are quoted in pounds, bacon being 334,000,000 odd pounds. They are not using the ton. I have account sales before me here, which I need not trouble you with, I think, in detail, but it appears that the great trade in America is carried on in lbs., not with cwts., quarters, and stones. I believe an American, speaking of the weight of a friend, never says he weighs so many stones weight, but so many pounds weight; they do not think in stones, and their ton, in the statistics I find here, is given as a ton of 2,000 avoirdupois pounds.

I could multiply instances of the confusion which the adoption of the metric system would cause in the way of catalogues. I have here a catalogue of Mr. Cameron, the well-known manufacturer of pumps; a price list with pumps varying by half-inches from two inches diameter to six inches diameter, and he has in Imperial weights and measures the quantity pumped per hour, the diameter in inches of the steam cylinders, and steam pipes and exhaust pipes, the diameter of suction pipes, the height and width occupied by the pump as it stands, the weight in cwts., followed by the price of the pump, and the duty which it would do in the way of gallons per minute. What Mr. Cameron would have to do in publishing his catalogue, if the metric system should be made compulsory, I am at a loss to know.

2848. But I suppose there are pump manufacturers in Germany and France who have catalogues?—No doubt; but then you must alter all your inches.

Mr. *Godson.*

2849. If they do as Mr. Richards does, it all works out well?—I will only allude to railway statistics and railway rates, which there was such a great fight over before two Houses of Parliament a year or two ago, as to the maximum rates. These were all rendered in pence per ton per mile; and, if the tons were but slightly altered in the metric system, certainly the mileage would have to be altered, and replaced by the kilometres. I do not think $1\frac{1}{4}d.$ per ton per mile, or whatever it be, would fit very well with the metric system.

Mr. *Godson*—continued.

I might quote from a gentleman whom you know, Dr. Hurter, who is the head of the central laboratory of the United Alkali Company. If I may quote his opinion in the matter, it is this: "In many of our works' laboratories the metric system is in use for analytical purposes; it is, however, a great mistake to think that the metric system confers any benefit even in this application. I am perfectly acquainted with both systems. I have, much against my own wishes, returned to the metric system in the central laboratory, which is supposed to be engaged chiefly in research work. I am, therefore, at present again in the metric system, and have been for the last five years, and I have no hesitation whatever in saying that there is no benefit whatever in the metric units of weight and measure; for analytical purposes the grain is in every way a superior unit. The only benefit arising from the use of the metric system is that it is a decimal system, but that is in no way a property inherent in the units of the system; my grain system was just as much a decimal system. It is necessary to keep apart the two things, the decimal system and the metric units of weight and measure. In many operations the decimal system is of enormous advantage, but it is not universally so. I hold that the addition of the identical weights of casks written in two ways, once as kilogrammes, and once as cwts., qrs., lbs., will be made in a shorter time by anyone in the English system. I have made the experiment some years ago with our clerks, and they all used more time in adding up the kilo columns, and all declared that it was stiffer mental work. The reason is obvious, when one's attention has been drawn to the matter. The difficulty or otherwise of an addition depends upon the frequency with which the larger digits above 5 occur: 1, 2, 3 are easily added; 7, 8, 9 already present difficulty. Now, in the ordinary invoice these digits do not occur except in the second column of the cwt. The first column only contains the digit 1: the column of the quarters contains only the digits 1, 2, 3; the column of pounds has only 1, 2, in the first row, and large digits can only occur in the second row. Out of five rows of figures in the English invoice there are three which have only small digits, while in the kilonotation the large digits occur in all the columns. It is very curious that the experiment should show that it is easier to add the five columns of the English system than the three of the kilo system. It is long since I tried the experiment, but I tried it with every clerk in the office of Gaskell, Deacon, & Co. at the time.

The foot is also decidedly the better unit than the meter. I tried our fitters as to how accurately they could mark from memory a foot length. It

Mr. *Godson*—continued.

was surprising how correctly they could do it. But when I asked them to mark the next neighbour to the meter, viz., a yard, they could not do it nearly as accurate. The convenience of the decimal system is one thing, and the convenience of the units quite a different thing. We do not use the kilogramme system in our manufacturing experiments. We have in the laboratory one weighing machine for about 4 cwt., made by Pooley's, which is divided on the beam both for kilo, and cwts., qrs., lbs. The experiments are carried out with cwts. and tons; the vessels are measured in cubic feet. It is hopeless to do anything else, and it is useless too. The multiplication of weights is not a frequent operation. In our office it occurs in the working out of units of alkali, units of sulphur, &c. But there is not a clerk who cannot do that as easily as with kilos. It is always done by conversion into decimals of cwt., and any clerk will write down without a moment's consideration the equivalent of any weight in decimals, or *vice versâ*."

Then with regard to my own experience in the works with which I was connected, we give a very great deal of attention to calculations of cost. I have here a week's work in the calculation of cost in the different details in my hand, and honourable Members will see what a large amount of calculation and figures is involved (*handing in the same*). These are in detail; first of all, the cost of making sulphuric acid from pyrites; secondly, the making of salt cake from sulphuric acid; thirdly, making soda ash from salt cake; fourthly, making soda crystals from soda ash; and then, fifthly, making bleaching powder. In every case the quantity of the raw material of the previous stage is charged against the next stage in cwts., and decimals of a cwt. in the quantity, and in shillings and decimals of a shilling, and the weight is calculated out in complete detail; and by the using of these decimals you can apply logarithms in calculating the proportions, because you do not turn all your sulphuric acid of one week into sulphate of soda, and all the sulphate of soda into the next stage, but you require a certain proportion, and it would be an interminable thing if you cannot apply logarithms; whereas you can apply logarithms by stating all these weights and measures and money decimally, which we have been in the habit of doing. The packages from these chemical works for America are now all given, to suit the Americans, in even lbs., without cwts. and quarters; and I have in my hand the account sales of a cargo of sugar sent by a firm I know from Trinidad to a United States port, in which all the weights are rendered in lbs., and the money, of course, in cents, and very little, nothing like the quantity of figures are required as would be if cwts. qrs. and lbs. were to be used.

Before I leave America, I wish to ask leave to record an extract which I made some time ago from the report of a body called the University Organisation of the State of New York, which was connected with a Committee of the House of Representatives. They appointed a Committee to inquire into the subject of uniform weights and measures, and I have here the report.

2850. What is the date of it?—1866. They

Mr. *Godson*—continued.

discussed the merits of the different systems, strongly preferring (taking the Anglo-Saxon point of view) the present system. But I desire principally, if you will allow me, to record this, because they quote largely from a report presented to the House of Representatives in 1821, by John Quincey Adams, the then Secretary of State, when it was proposed to adopt the metric system. He approached the subject with an enthusiastic desire for a common system of weights and measures for all nations, and examined the question in all its bearings; and he came to a conclusion decidedly against it, and I should like that put upon record. This is what Mr. Adams says: "The French metrology, in the ardent and exclusive search for an universal standard from nature, seem to have viewed the subject too much with reference to the nature of things, and not enough to the nature of man. Its authors do not appear to have considered the proportions dictated by nature between the physical organisation of man, and the unit of his weights and measures. The standard taken from the admeasurement of the earth has no reference to the admeasurement and power of the human body. The metre is a length of 40 inches nearly; and by applying to it exclusively the principle of decimal division, no measure corresponding to the ancient foot was provided. A unit of that denomination, though with slightly varied differences of length, was in universal use among all civilised nations; and the type of it is found in the dimensions of the human body. Perhaps for half of the occasions which arise in the life of every individual for a linear measure, the instrument to suit his purpose must be portable and fit to be carried in his pocket. Neither the metre, the half metre, nor the decimetre are suited to that purpose. The half metre corresponds, indeed, with the ancient cubit, but perhaps one of the causes which have everywhere, since the time of the Greeks, substituted the foot in the place of the cubit, has been the superior convenience of the shorter measure. Besides which, the cubit being the unit, the half cubit might serve the purpose of the foot; but the metre, divisible only by two and ten, gave no measure practically corresponding to the foot whatever. It appears to have been considered that decimal arithmetic, although affording great facilities for the computation of numbers, is not equally well-suited for the division of material substances. A glance of the eye is sufficient to divide material substances into successive halves, fourths, eighths, and sixteenths. A slight attention will give thirds, sixths, and twelfths. But divisions into fifth and tenth parts are among the most difficult that can be performed without the aid of calculation." There is a further quotation from John Quincy Adams, which reminds us that it is the great mass whose interest we must keep in view in this kind of legislation:—"To the common mass of the people the use of weights is in the market and the shop. The article weighed is to be carried home for the daily subsistence of the family. Subdivisions of the pound, the half, the quarter of a pound, are often necessary to conciliate the wants and the means of the neediest portion of the people, that portion to whom the justice of weight and measure is a necessary of life,

Mr. *Godson*—continued.

life, and to whom it is one of the most sacred duties of the legislator to secure that justice so far as it can be secured by the operation of human institutions. The transition state in France caused frauds on the scanty pittance of the poor. Small dealers in groceries and liquors gave the people $\frac{1}{2}$ kilo. for $\frac{1}{2}$ lb. and $\frac{1}{2}$ of a litre for the $\frac{1}{2}$ setier. The decimal division became snares to the honesty of the seller and cheats upon the wants of the buyer.

Then with regard to the Education Code, the paragraph in the Code that in certain standards children are to be taught to know the principles of the metric system, and to be able to explain the advantages to be derived from uniformity in the mode of forming multiples and sub-mutiples of units; that is to say, the children are to be taught the abstract doctrine that all divisions of weights and measures, upwards and downwards, should be by 10. That is a doctrine which is not held by many of our scientific men, and I think it is not right that a controversial point like that on which eminent scientific men differ should be imposed upon the children in the schools as a matter of dogma, when they are certainly not capable of forming an opinion upon the subject. That was objected to in the House of Commons in 1872, in a debate raised by myself and Mr. Beresford Hope; and Mr. Forster, the then Secretary of Education, dropped it; but Sir W. Hart Dyke, after it had been dropped for a number of years, restored it, I think, at the request of the Decimal Association about four years ago, in the very words.

2851. And there it stands still?—Yes.

2852. We are all acquainted with the argument used by Mr. Beresford Hope at that time, of course?—Yes, in opposing the use of the Education Department as the propaganda of a system of weights and measures which had not received the sanction of Parliament. That was the point. On this question of education I should like to quote the opinion of Sir George Airy, the late Astronomer Royal, contrary to the doctrine that all divisions of weights and measures should be decimals. He says: "It appears to me that the practice of mankind, as regards their selection of scales of multiples and sub-divisions, in every subject which I have examined may be described thus: For each particular subject to which measure, &c., is applied some one measure, &c., is adopted as the standard. Then the multiples of this measure, &c., are taken on the decimal scale, and the sub-divisions are taken on the binary scale. These sub-divisions are taken without any regard to their coincidence or non-coincidence with inferior measures, &c. The coasting sailor uses the league, $\frac{1}{2}$ league, $\frac{1}{4}$ league, without regard to miles or yards. The traveller uses the mile, $\frac{1}{2}$ mile, $\frac{1}{4}$ mile, furlong; and never combines with them the yard or the foot. The sailor in sounding uses the fathom, $\frac{1}{2}$ fathom, $\frac{1}{4}$ fathom, and thinks of no other measure. The vendor of drapery uses the yard, $\frac{1}{2}$ yard, $\frac{1}{4}$ yard, &c., down to the nail, without regard to inches. The joiner uses multiples of inches to a large number, and subdivides the inch to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$ ... It is very little important whether the relation between the standards adopted for the different measures (for instance, the mile and the yard) be or

0.55.

Mr. *Godson*—continued.

be not simple, provided that it be ascertained." Then Sir George Airy also says in his evidence in 1862, at Number 1968: "If I had a new nation to create with a new style of weights and measures I would give them the binary scale throughout, that I consider to be nearest perfection, with means to enable us to use decimal multiples or sub-multiples." I have also given quotations from Professor De Morgan's evidence and from the Second Report of the Standards Commission from the evidence of the Warden of the Standards, Mr. Chisholm. On page 829 of that Second Report on the question of the calculation of weights from cubic measurement, Mr. Chisholm, the Warden of the Standards, said: "In this respect the metric system appears to have an advantage over the Imperial system, in which the scientific weight of a cubic foot of water is 62·3862 lbs. But in practical operation the difficulty in the Imperial system is, to a great extent, got rid of by taking the cubic foot of water at the approximate weight of 1,000 ounces. The legal weight in ordinary air being 997·136 ounces, the result will evidently be 0·2864 per cent. in excess. The weight in avoirdupois ounces is thus found approximately with as much facility as in the metric system, though not quite so accurately."

2853. How do you get rid of the difficulty, which has been put before us by a German witness, that in Germany they tried to evolve the two systems, one to be carried out internally and the other externally, and they found it such a nuisance that they had to give it up directly?—I say in reply to that that Germany is surrounded by countries with a frontier. We are an island bounded by the sea, and we have a liberty that Germany has not. Take Strasbourg. Strasbourg used to be French, it is now German. One end of the bridge over the Rhine was in Germany and the other in France. To have two different systems of weights and measures at opposite ends of the same bridge, with people passing to and fro continually, would become intolerable.

2854. Is not that merely a question of degree at the very best; it was a great nuisance in Germany, but is it not a nuisance as between England and France?—No; it is a trouble only to the people who have to do the translation in the trade between the two countries.

2855. But then the plan you propose would be that those people should get everything printed in the foreign language. Does it not strike you that it would be an enormous and needless expense if they have, first of all, to have it printed in the English language, and then printed in the metric system as well; whereas if we had the metric system once for all, that would do, so far as the system is concerned?—If the incident of the Tower of Babel had never occurred we should have saved a great deal in the diversity of languages.

2856. We are talking of the metric system?—I am treating it as a matter of language. If every man, woman, and child in Great Britain and Ireland, and, so far as that goes, in America and all the Colonies, has to learn the French language in weights and measures, it is rather a

Mr. *Godson*—continued.

large burden upon them in order to save trouble to those who trade between the metric countries and our own.

2857. Does it strike you that it is not only France. The language, of course, applies only to France and a certain proportion of the educated world; but, as regards the metric system, it applies practically to the whole of Europe, and is fast applying to the rest of the world?—It has been recently extending in new countries, but I look to the Anglo-Saxon race as the race of the future.

2858. Bar the Chinese, I suppose. However, if the United States, as the honourable Chairman has put it, have agreed to it, and the subject is under debate there, you would take it that we must follow suit; you would admit that?—Yes, as regards trade with the States.

2859. And also with regard to the colonies? The colonies are at present with us; but supposing that the colonies followed the United States, we should certainly have to go then if our colonies went as well?—Yes, just as with the States.

2860. You think there is great difficulty in applying these new measures to the old manufactures, or old mensuration like railway mileages? Do you know that the carpet manufacturers, although they do nothing but supply by English weights and measures, have, without any difficulty whatever, adapted the metric weights and measures to their carpets in the production?—Of course they can, if they understand their own business, weave their carpets any width.

I hold in my hand also a price list of one of the largest warehousemen in London, containing 480 pages, with every description of drapery goods and hosiery, which contains thousands of dimensions of feet and inches, and my comment upon that is that I do not see how the change is to be made, how all these dimensions are to be translated and written into the metric system.

Mr. *Godson*—continued.

*Chairman.*

2861. You have given us a very considerable amount of valuable evidence from your point of view. Now, we have had a very large number of witnesses before this Committee; you have sat here the whole time, you have heard their remarks and their evidence; but we have not had from you any provision of witnesses speaking on your behalf. I do not know whether you have endeavoured to obtain any witnesses from your point of view who would give evidence; but we have endeavoured to obtain competent persons who would express the views which you have expressed, and have failed to find them, with the one exception of Sir Frederick Bramwell. Sir Frederick Bramwell, in that respect, I think, I am not wrong in saying, stands quite alone. None of the other engineers, however you might choose them, would come forward and express the same opinion that Sir Frederick Bramwell did. If you hold the strong views that you say you do, and wish to influence the Committee, as you no doubt have a right to do, I should like to say that I think it would have been only the proper thing if you had been good enough to obtain for us evidence to corroborate your view; and I ask you whether you have endeavoured to do so?—If the late Mr. Hawksley, the eminent water engineer, had been alive, he would have taken the same view as Sir Frederick Bramwell.

2862. Surely there are plenty of other people alive, and if your views are so strong and cogent and important, you would have been able to strengthen your evidence by bringing some of them from outside to that effect?—People do not realise how inconvenient the change would be.

Mr. CHARLES FRUSHER HOWARD, called in; and Examined.

*Chairman.*

2863. YOU have given considerable attention to this subject, but I must tell you that the Committee have decided not to examine you at length, because their time is very short, and, owing to circumstances over which they have no control, they are obliged to bring their proceedings to a close. At the same time, the Committee did not wish that you should have come here (although you must remember that we did not summon you) without being able to be called. I will ask you simply to tell us, in as few words as you can, whether or not you agree that the metric system is one which it is desirable for many reasons to introduce into this country, or whether you disagree with that statement?—When you say the metric system, I suppose you mean the French metric system?

2864. There is only one metric system, that is to say, the metric system which is adopted all over the rest of the world almost?—If I understand that, my opinion is that the British system is immeasurably superior in every respect. Any calculation which can be made by the French metric system we can make with equal ease by the British system, and hundreds of calculations can be made much more easily by the British system than by the metric system itself. To give an illustration: you have 21 25 francs.

*Chairman*—continued.

2865. Would you please put aside the question of money?—But the commodities which are to be sold by weight and measure will have to be paid for.

2866. We have nothing to do with the French system of money; we have only got to do with the present system of weights and measures in England, and the respective advantages or disadvantages of employing the metric system instead of our own?—But you will pardon me if I say that it is not possible to deal with this subject if we leave out the money, because every commodity has to be paid for.

2867. Whether it is possible or impossible, we have got to do it, and therefore you must be kind enough, as other witnesses have been, to choose your examples, not with regard to money at all, but with regard to weights and measures?—Then I will take the Troy weight. Put down seven ounces, 17 pennyweights, 19 grains of gold at 1*l.* an ounce; you will see that these fractions of

the

*Chairman*—continued.

the standard units fit into each other: seven ounces 7*l.*, 20 pennyweights, 1 ounce; 20*s.*, 1*l.*; consequently every pennyweight is a shilling, that is 17*s.*; 480 grains in the ounce, 480 halfpence in the sovereign; consequently every grain is a halfpenny, 7*l.* 17*s.* 9½*d.* And if there is any advantage in writing it in decimals you can write it instantly as readily as you can write the metric system in decimals.

2868. You have written a book upon the subject, which you have presented to the Committee?—For 25 years I have made this subject a special study, and it is only in the last 10 years that I have realised the superiority of the British system.

2869. May we take it that the Committee may obtain the information that you are prepared to give us by reading your book?—No, it does not appear in the book; the book only shows how to reckon easily.

2870. Then, as I understand, your opinion is averse to the adoption in England of the metric system?—It would not only be a national, but a world-wide calamity.

2871. Then do you consider that it is a world-wide calamity that that system has been adopted by the greater portion of the civilised world already?—But it has not been adopted by any country in the world that had ever had the advantage of the British system; and, apart from that, from my researches I find that in the most ancient periods of history, right down to the present time, the inch, the foot, and the £ belonging to the British system formed part of all those systems of money and weights and measures which I have been able to trace on the face of the earth; and the division of the standard units is by 12's and by 20's. Very recently in Troy, in excavations in old Troy, a gold coin was found weighing 240 grains which bears that out.

2872. That may be very interesting from an archæological point of view, but it does not touch the question of to-day?—I was going to show that 12's and 20's were the divisions; 12 times 20, 240, you will find in all the systems of money and weights and measures that have ever existed in the world until this French system was invented.

2873. Holding those views, does it not strike you as singular that all other nations practically have adopted this system; that Japan and all those countries have adopted it, and we learn from the evidence of American gentlemen that they are on the point, or, at any rate, are considering the question, of adopting the metric system; and if that metric system is so bad and perverse, and so much inferior to the English system, does it not strike you as remarkable that all the other civilised countries should have adopted it?—Not at all, because no other country that has adopted the metric system has ever had the advantage of the British system.

2874. Do you think that if our system was so much better than the French system, they might not have adopted it in the meantime. Why did they not in Japan adopt the English system, and why did they not in Germany and South America, and all those other countries, which are not necessarily connected with France; why have they adopted the French system, whereas they might have adopted the English system if they had thought fit?—The reason is, because the English people do not know what a treasure they have in their system. Not one Englishman in a thousand from my observation knows the tables of his weights and measures, and not one in five thousand knows anything about the practical use of decimals, and if the English know so little about it, foreigners are likely to know less.

2875. Do you not think that even if the English are unaware of the blessings, as you say they are, of their own system, still some eminent foreigners would not have found it out, and would have adopted it. It is rather a strange circumstance, is it not, that they have not done so?—You can test it in this way: If you ask the first twenty educated gentlemen that you meet how many grains there are in an ounce of troy, they will probably not be able to tell you.

2876. I only asked you that general question, and I want your general answer. You told us that we are unaware of the blessings of our own system, and I ask you again: if that is so, how is it that all the foreigners have not been able to find out the excellent system that we have, and to adopt it rather than the metric system?—I think I did answer your question, when I said that no nation yet which has had the advantage of the British system has adopted the French system in its place.

2877. But no other nation ever did have the advantage of the British system?—The Americans have it.

2878. They were part and parcel of ourselves, and they carried it over with them; but no other nation that had the opportunity has ever adopted it. I put to a witness some time ago whether he thought that the Germans, the Spaniards, or the Italians would ever have adopted our system, and he ridiculed the idea?—The Germans, as I suppose you are aware, had at least 25 different yard measures, and about 27 different pound weights, and their system was in the most hopeless confusion, so that it was a very good thing for them that they should accept the French system and adopt it, because it did away with their inter-state controversies as to which should be the Imperial system.

2879. Now let me ask you this again. We are told that in the United States they are considering this question, and that in all matters with regard to Germany the metric system has been adopted. That you consider a mistake?—The United States will give us the best backing up in favour of our system of any people in the world. At the end of the Revolution, while the American people, feeling very bitter against England, started to re-model all their institutions, they started attempting to frame a new system of money and weights and measures, and adopted the dollar as the standard unit.

2880. I must ask you to consider the question from a practical point of view, and not to go into history?—But this is practical, if you will please allow me to say so. When they had got so far, their wise men suggested, "If we are going to have a new system of weights and measures, let us have the best; let us examine all the proposed systems," and they appointed a special committee,

*Chairman*—continued.

and the report of that committee, I suppose, is the most glowing eulogy of the British system that was ever penned, and it is signed by John Quincy Adams. He points out how immeasurably superior the British system is to the proposed French system; and if you wish to make yourselves familiar with the relative merits of the two, if you read that report, I think you will come to the conclusion that we have the best system.

2881. Admitting for the moment your view to be correct, and that our system is really the best that could possibly be invented, I ask you as a practical man, now seeing that all the other countries have adopted the metric system, and hearing from all the witnesses whom we have examined that we are suffering in trade and commerce, from the fact that we are standing nearly alone, while nearly all the other countries have adopted the metric system, what is your advice?—My advice is, that the British clerk shall be taught to write and read the British money in decimals; and that in any business with any foreign country we should quote their prices in the language and terms of money and weights and measures of the country with which we wish to do business. And one thing appears to have been overlooked. If scientists and financiers and merchants having foreign customers were the only persons to be considered, then I should say, have a universal system; but you must bear in mind that these financiers and scientists and merchants having foreign customers, although they are a very important section of the community, are a very small minority. I suppose there are not half a million persons in the British Islands who are interested in these matters; but the weights and measures that we have are adapted to the capacity of the millions who deal directly with retailers. Take the commonest kind of fractions, they are clumsily expressed in decimals. I suppose that in any transaction where money passes the half is used 100,000 times when the tenth is used once.

2882. But you have no reason to suppose that, because we advise the use of the decimal system where it is useful, we should not permit the use of the half or the vulgar fraction where it is useful?—Exactly; that is the advantage of our system.

2883. That is to say, that the adoption of the metric system would in no way necessarily interfere with the use of the half or the quarter or the fifth, or any other fraction that you might find it advisable to employ? But have you never noticed how clumsily these very common fractions are expressed in decimals?—A child understands what a half is, but if you have to write it down decimally you have to write ·5; and the ¼th, half of half, you have to write ·25; and ⅛th you have to write ·125.

2884. We are all perfectly acquainted with those matters?—But the point that I want to make is that where there are millions of domestic transactions by the common people, who cannot think in decimals, where there may be only one

*Chairman*—continued.

international one; and that, in adopting a system of weights and measures for the use of the nation, the requirements and capacities of all persons having occasion to use it must be considered; and from my observation of men (and I have seen a great many), I am quite convinced that more than half of the people who are born into this world, and live to manhood, are quite unable to understand the decimals. Take the sixteenth. A child knows that an ounce is the 16th part of a lb.; but it takes a highly-trained intellect to realise that ·0625 is the decimal of it.

2885. Did you ever learn that in Germany, where the system has been adopted, or in France, or in any other country where it has been adopted, there were all these great difficulties which you predict and prophesy; or have you ever heard that any one person in any one of the countries ever desired to return to the old system?—Once for all, let me say that the system which they have is immeasurably better than the system which they had; they made about as good a bargain as a man would do who had a very inferior Geneva watch broken, and badly out of repair who exchanges it for a new one of the same kind. They have made a good bargain; but we are in a different position; we happen to have an excellent system of money and weights and measures, which our people have no difficulty in dealing with.

2886. Pray keep the money matter out?—But you cannot separate them; if you do you lose sight of the most important part of the subject.

2887. But we have nothing to do with the question of money?—But all these commodities, whether they are sold by length or weight, have to be paid for in money.

2888. I am afraid we cannot ask you to give us much more information?—I should like to have had an opportunity of giving the information which I have prepared; it would not have taken me a quarter of the time that I have taken already.

2889. I understand that you consider that the British system though not absolutely perfect is still a marvel of constructive wisdom?—Marvellous; the more I know of it the more profound is my admiration for the wisdom of the men who framed it.

2890. And you think that it would be a sin as well as a mistake to give up the use of the cwt., being 112 lbs.?—A world-wide calamity and the ton, cwt., qrs., lbs.

2891. And you also think that there is an advantage in having two systems of weight, the troy weight and the avoirdupois weight?—Yes; and I would have every table that has ever been excised from the old system restored, not perhaps for actual use, until we find out what the use was. I believe that hundreds of years ago the system was a much more perfect system and a much more useful system than it is to day, and that every attempt to improve it has damaged it, and has made it less useful.

25 *June* 1895.

Mr. THOMAS KYLE, called in; and Examined.

*Chairman.*

2892. YOU are county inspector of weights and measures for Buckinghamshire?—Yes.

2893. You also hold the Board of Trade certificate of qualification?—Yes.

2894. You are an associate of the Society of Engineers, and chairman of the Incorporated Society of Inspectors of Weights and Measures?—Yes.

2895. What is the number of members of your society?—Our members come from all the chief centres of industry in the country, Glasgow, Edinburgh, Dundee, Aberdeen, Manchester, Liverpool, Bristol, London, &c.

2896. What do they number?—We number over 300.

2897. And your society is the Incorporated Society of Inspectors of Weights and Measures?—Yes; and the only Society of Inspectors of Weights and Measures in this country.

2898. I believe a resolution has been passed by your society in favour of the metric system?—Yes. At the last annual meeting of the society held in London, and the largest gathering of inspectors ever held in the country, there was a resolution unanimously passed in favour of the metric weights and measures, and pointing out that it would facilitate our general trade, and remove some of the disabilities under which we now labour.

2899. You have come here as an expert in these matters so far as inspection is concerned. You have heard the evidence of the last witness; do you agree with him, or not, as to the perfection of our present system?—His views are not in accordance with the views of the inspectors of weights and measures that I represent.

2900. And those inspectors are in the position of giving an expert opinion on the matter?—They are the chief experts in the country on weights and measures.

2901. You do not agree with him, that to adopt the metric system would be not only a disgrace, but a calamity?—In no way whatever do I agree with him.

2902. On the contrary, you think it would be a good thing?—I do, indeed.

2903. And your society think so too?—Yes.

2904. I do not know that we need go into great detail at this present time, for as you are aware the time of the Committee is limited. What are the points that you especially desire to speak about?—In the first place, the different weights and measures that may be used for trade. Under Section 19 of the Weights and Measures Act, 1878, all persons are required to "sell" by Imperial weight and measure, or some multiple or part thereof, under a fine; and under clause 22 of our regulations, an inspector is authorised to pass the following weights and measures. I will now hand in a return naming all the weights and measures in this country which an inspector is to pass.

[*The Witness handed in the following Table.*]

*Chairman*—continued.

Inspectors are only to verify and stamp for use in trade weights and measures marked with the following denominations:—

| Legal Denomination. | Abbreviation allowed. |
|---|---|
| **MEASURES.** | |
| Measures of length: | |
| 100 feet | 100 ft. |
| 66 feet, or a chain of 100 links | Chain. Links. |
| Rod, pole, or perch | Pole. |
| 10 feet | 10 ft. |
| 6 „ | 6 „ |
| 5 „ | 5 „ |
| 4 „ | 4 „ |
| 3 „ | 3 „ |
| 2 „ | 2 „ |
| 18 inches | 18 in. |
| 1 foot | 1 ft. |
| Yard | 1 yd. |
| Half-yard | ½ „ |
| Quarter-yard | ¼ „ |
| Eighth of a yard | ⅛ „ |
| Sixteenth of a yard | 1/16 „ |
| Nail | Nail. |
| Inch | In. |
| Measures of capacity: | |
| Liquid measures: | |
| Twenty-five gallons | 25 gallons. |
| Twenty-four „ | 24 „ |
| Twenty-three „ | 23 „ |
| Twenty-two „ | 22 „ |
| Twenty-one „ | 21 „ |
| Twenty „ | 20 „ |
| Nineteen „ | 19 „ |
| Eighteen „ | 18 „ |
| Seventeen „ | 17 „ |
| Sixteen „ | 16 „ |
| Fifteen „ | 15 „ |
| Fourteen „ | 14 „ |
| Thirteen „ | 13 „ |
| Twelve „ | 12 „ |
| Eleven „ | 11 „ |
| Ten „ | 10 „ |
| Nine „ | 9 „ |
| Eight „ | 8 „ |
| Seven „ | 7 „ |
| Six „ | 6 „ |
| Five „ | 5 „ |
| Four „ | 4 „ |
| Three „ | 3 „ |
| Two „ | 2 „ |
| One gallon | 1 gallon. |
| Half-gallon | ½ „ |
| Quart | Quart. |
| Pint | Pint. |
| Half-pint | ½ pint. |

*Chairman*—continued.

| Legal Denomination. | Abbreviation allowed. |
|---|---|
| **MEASURES—*continued.*** | |
| Liquid measures—*continued.* | |
| Gill | Gill. |
| Half gill | ½ gill. |
| Quarter gill | ¼ gill. |
| Dry measures: | |
| Four bushels | 4 bushel. |
| Bushel | Bushel. |
| Half-bushel | ½ bushel |
| Peck | Peck. |
| Gallon | Gallon. |
| Half-gallon | ½ gallon. |
| Quart | Qrt. |
| Pint | Pt. |
| Half-pint | ½ pt. |
| Apothecaries' measures: | |
| 40 fluid ounces, to half a fluid ounce | 40 fluid oz., to ½ fluid oz. |
| 16 fluid drachms, to half a fluid drachm. | 16 fluid dr., to ½ fluid dr. (or symbols.) |
| 60 minims, to 1 minim | 60 min. (♏), to 1 min. (♏). |
| **WEIGHTS.** | |
| Avoirdupois weights: | |
| Cental, or 100 pounds | Cental, or 100 lb. |
| 56 pounds, or half-hundredweight | 56 lb., or ½ cwt. |
| 28 „ or quarter-hundredweight. | 28 „ or ¼ „ |
| 14 „ or stone | 14 „ or stone. |
| 7 „ | 7 „ |
| 4 „ | 4 „ |
| 2 „ | 2 „ |
| 1 pound, or 7,000 grains | 1 „ |
| 8 ounces, or half pound | 8 oz., or ½ lb. |
| 4 „ or quarter pound | 4 „ or ¼ „ |
| 2 „ | 2 „ |
| 1 ounce, or 437½ grains | 1 „ |
| 8 drams, or half-ounce | 8 dr., or ½ oz. |
| 4 „ or quarter-ounce | 4 „ or ¼ „ |
| 2 „ | 2 „ |
| 1 dram | 1 „ |
| ½ „ | ½ „ |
| Pennyweights: | |
| 480 grains, or 20 pennyweights | 480 gr., or 20 dwt. |
| 240 „ 10 „ | 240 gr., or 10 dwt. |
| 120 „ 5 „ | 120 gr., or 5 dwt. |
| 72 „ 3 „ | 72 gr., or 3 dwt. |
| 48 „ 2 „ | 48 gr., or 2 dwt. |
| 24 „ 1 pennyweight | 24 gr., or 1 dwt. |
| Troy weight: | |
| Decimal troy ounce bullion weights: | |
| 500 ounces, troy | 500 oz. tr. |
| 400 „ | 400 „ |
| 300 „ | 300 „ |
| 200 „ | 200 „ |
| 100 „ | 100 „ |
| 50 „ | 50 „ |
| 40 „ | 40 „ |
| 30 „ | 30 „ |
| 20 „ | 20 „ |
| 10 „ or 4,800 grains | 10 „ |
| 5 ounces, to 0·001 ounce | 5, to 0·001. (Wire weights below 0·01 oz. need not be marked.) |

*Chairman*—continued.

| Legal Denomination. | Abbreviation allowed. |
|---|---|
| **WEIGHTS—*continued.*** | |
| Apothecaries' weight: | |
| 10 ounces | 10 oz. tr. |
| 8 „ | 8 „ |
| 6 „ | 6 „ |
| 4 „ | 4 „ |
| 2 „ | 2 „ |
| 1 ounce or 480 grains | 1 „ |
| 4 drachms | ℥ iv. |
| or half an ounce | ½ oz. tr. |
| 2 drachms | ℥ ij. |
| 1 drachm | ℥ i. |
| 2 scruples | ℈ ij. |
| 1½ „ | ℥ß |
| or half a drachm | ℥ß |
| 1 scruple | ℈ i. |
| half a scruple | ℈ß (Wire weights below half a scruple need not be marked.) |
| 6 grains | 6 |
| 5 „ | 5 |
| 4 „ | 4 |
| 3 „ | 3 |
| 2 „ | 2 |
| 1 grain | 1 |
| half a grain | ½ |
| Grain weights: | |
| 4,000 grains | 4,000 gr. |
| 2,000 „ | 2,000 „ |
| 1,000 „ | 1,000 „ |
| 500 „ | 500 „ |
| 300 „ | 300 „ |
| 200 „ | 200 „ |
| 100 „ | 100 „ |
| 50 grains to 0·01 grains | 50, to 0·01. (Wire weights below 10 grains need not be marked.) |

No weight or measure to bear more than one denomination.

2905. In that list does the kilogramme weight occur?—No.

2906. Then if you found a kilogramme weight on the table or counter of any shop that you entered, what would your course be?—I would ask the man if it was in use for trade, and if he told me that it was, I would seize it and take legal proceedings against him, either for having an unstamped weight or an unauthorised weight.

2907. Would the same apply to the measure of the metre, if you found a metre on a man's counter; would you legally be able to withdraw that also, and inform him that he was acting illegally in using it?—I should first give him a warning, but I should immediately proceed against him if he did not act upon it.

2908. You are of opinion that to use the kilogramme weight or metre measure is illegal under

*Chairman*—continued.

under the Act?—Yes, for trade. The return which I have handed in shows the only weights and measures which an inspector can pass, and no weight or measure can be used for trade unless it is passed by an inspector.

2909. Has your society considered the question of the adoption of the metric system, first of all as a temporary measure and not compulsory, and afterwards as a compulsory measure?—If it were so decided I am of opinion that the Board of Trade should have some control of the inspectors, and the Act be made obligatory, or the change will end in chaos. I would suggest that a Commission, or a Departmental Committee of the Board of Trade, should be appointed to inquire into the best means of carrying the change into effect with despatch, with efficiency, and with the minimum loss and inconvenience to traders. I would give a transition period of two years, during which time I would cause to be exhibited throughout the country, in shops and in market places, and such like, placards with details of the change in weights and measures. With those provisos and other reasonable safeguards I am of opinion that the introduction could be carried out with little or no unpopularity.

2910. Are you aware that in the French schools not only the models, but the actual size vessels and weights and measures are exhibited?—I have heard so.

2911. Would you like to see the same thing carried on here in museums, schools, and certain public places, free libraries, for example, as suggested by an honourable Member, where actual measures should be shown, in order to facilitate the adoption of the system after a time?—I think that would be highly advisable.

2912. Then I understand that you consider that a change of the present system is desirable?—Yes.

2913. And that you are expressing the views of your society?—Altogether. Referring to the return which I have handed in, I may perhaps summarise it in this way, that an inspector has to recognise at least 92 different weights, 15 measures of length, and 48 measures of capacity, a total, at least of 155; and these 155 weights and measures may be legally marked in at least 184 different ways.

2914. Then you would like to see not only a better system of weights, actual units of weights and measures or standards introduced, but you would like to see the system of inspection and marking altered?—Altogether altered. We have grown into the system; perhaps I should not use the word that we are fossilised in our system, but we have grown on in it until it is possible for people to mark all the weights in this country in 184 different ways, which in my opinion is sufficient evidence to show that we are fossilised.

2915. Whereas, if we adopted the metric system, we should not only do away with those different units which you have to pass at present, but also with the mode of marking them?—Yes.

2916. On this point I should like to ask, coming across people as you do, retail people and so on in carrying out your inspection, can you give the Committee any evidence or information as to whether or not there would be much friction or objection and inconvenience caused by the change of system?—It is an Englishman's privilege to grumble, and if the Act was made not obligatory, there would be grumbling; but I have no doubt whatever that if the Act were made obligatory after two years, the alteration would be carried out with very little unpopularity. It would cause trouble and inconvenience undoubtedly.

2917. Do you think that people, after they had learnt what it was, would find that it was a better system, and would be reconciled or more than reconciled to it?—I mean to say that after the system had been in use for three or five years, there would be no effort to go back to the old system.

2918. You do not, therefore, agree with the previous witness on this question?—Oh dear, no; I do not.

2919. Of course the question has arisen as to how far the weights at present in use could be altered to metric weights, and we have had some evidence on that point. What is your opinion with regard to that?—I have gone into that very carefully.

2920. Will you state what the possibilities of that would be. Could our present weights be altered into metric weights?—As to whether our present commercial weights could be altered into metric weights, I have here enumerated what they are, and how they could be altered:—

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| To alter 56 lbs. to 25 kilograms, it would be necessary to add about 1·1 lb. | | | | | | | | | |
| „ | 28 | „ | 13 | „ | „ | „ | „ | add over | 9·6 oz. |
| „ | 14 | „ | 6 | „ | „ | „ | „ | deduct over | 12·8 oz. |
| „ | 7 | „ | 3 | „ | „ | „ | „ | deduct „ | 6·4 „ |
| „ | 4 | „ | 2 | „ | „ | „ | „ | add „ | 6·4 „ |
| „ | 2 | „ | 1 | „ | „ | „ | „ | add „ | 3·2 „ |
| „ | 1 | „ | ½ | „ | „ | „ | „ | add „ | 1·6 „ |
| and so on. | | | | | | | | | |
| „ | 8 oz. to 250 grams | | | | „ | „ | „ | add „ | ·8 „ |
| „ | 4 „ to 125 | | | | „ | „ | „ | add „ | ·4 „ |

I do not consider that it would be advantageous to alter a 56 lb., 28 lb., or 14 lb. weight. A 7 lb. brass might be altered, but this would altogether depend upon the shape; a bell brass weight could be altered. A 2 lb. brass bell weight might be repaired, and also a 1 lb. weight but anything under this capacity I consider would be useless; and taking the whole range, 56 lb. down to ¼ oz., I think a trader would find it cheaper in the course of time to have a complete set of new weights.

2921. Have you formed any idea as to the cost of the change which you think would be necessary?—The cost to a trader who kept a 56 lb. set of iron weights would be about 10*s.* 6*d.* A further reduction might be made from that amount of about 1*s.* 6*d.* for the sale of old weights as old metal, which would make the net cost about 9*s.* To a trader who kept a 7 lb. iron set of weights (it is not everyone who keeps 56, 28, and 14 lb. weights), the cost would be about 2*s.* 6*d.* These figures are only for iron weights; if brass weights were used, the figures would be much increased, a 7 lb. brass set would cost 16*s.* To a little shopkeeper who kept a 4 lb. set of iron weights, and a quart, pint, and half-pint wooden or tin measure, the total cost would be about 5*s.*; and so, in proportion to the number and quality of weights and measures, the cost would increase.

*Chairman*—continued.

2922. Have you formed any idea as to what the total cost to the country would be?—I have gone very carefully into that, and I consider that no one is in a position to give even an approximate guess.

2923. Still it would not be a very serious matter?—I do not think so. I have prepared a list from only 25 centres in England, Ireland, and Scotland which I beg to hand in. giving the anomalous customary measures at present in use in this country :—

[*The Witness handed in the following Return*] :

A pot of apples, in Wolverhampton, equals 75 lbs.

A pot of beans and peas, in Warwickshire, equals 40 lbs.

A tub of potatoes, in York City, equals 20 stone, *i.e.*, 2½ cwt.

A pound of butter, in Wigan, equals 16 or 17 ozs.

A sieve of vegetables, in West Ham, equals 1 bushel.

A sieve of vegetables, in Rochester, varies, 7, 8 and 9 gallons to the bushel.

A sieve of vegetables, in York City, varies, 24 to 42 lbs.

A sieve of plums or black currants, in Warrington, varies, 10 to 50 lbs.

A bushel of peas, in Wigan, equals 60 lbs.

A bushel of potatoes, in Wigan, equals 84 lbs.

A bushel of corn, in Sunderland, equals 46 lbs.

A bushel of corn, in Shropshire, varies, 72 to 75 lbs.

A bushel of corn, in Hereford, equals 63 lbs.

A bushel of corn, in Newtown, equals 80 lbs.

(But the greatest absurdity is to be found in Cornwall, where it is actually supposed to contain 240 lbs.)

A "stone" of live meat equals 14 lbs.

A "stone" of dead meat equals 8 lbs.

A "stone" of cheese equals 16 lbs.

A "hobbet" of old potatoes, in Flintshire, equals 200 lbs.

A "hobbet" of new potatoes, in Flintshire, equals 210 lbs.

A "Llestr" of lime, in Carnarvonshire, equals 1 bushel.

A "punnet" of strawberries, in Greenock, varies from ¾ lb. to a pound.

In Forfar, fruit is sold by the "Scotch pint" and by the "Choppin." A Scotch pint equals three Imperial pints, and the "Choppin" equals 1½ pints.

In Dumfriesshire the Scotch pint equals four Imperial pints.

Vegetables are sold in Flintshire, in "Lippins," a Lippin equals ½ gallon.

A "Molley" for vegetables, in Northamptonshire, varies from 12 to 40 lbs., there being large and small Mollies.

A "Molley" for vegetables, in Chester, equals 3½ gallons.

A peck of fruit, in Manchester, varies from 14 to 18 lbs.

A pad of potatoes, in Middlesex, equals 112 lbs.

A punnet of vegetables, in Middlesex, equals 1 lb.

A nipper of vegetables, in Middlesex, equals 12 lbs.

A pack of vegetables, in Huddersfield, equals 240 lbs.

A hoop of vegetables, in Kendal, equals 1 Imperial gallon.

A peck of potatoes, Gloucestor, equals 14 lbs.

A peck of potatoes, heaped, in Gloucester, equals 16 lbs.

A seam of straw, in Devon, equals 200 lbs.

A seam of hay, in Devon, equals 373 lbs.

A seam of green wood, in Devon, equals 336 lbs.

A seam of dry wood, in Devon, equals 280 lbs.

In Northumberland they sell vegetables by the "Forpet," which equals 1 gallon; by the half-forpet, which equals ½ gallon; and by the "Beatment," which also equals a gallon.

A pottle of vegetables, in Buckinghamshire, equals ½ Imperial gallon.

A flat of vegetables, in Buckinghamshire, equals 1 bushel.

In Cambridge Borough, butter is sold by the yard; each yard is supposed to weigh a pound.

A boll of wheat, in Buteshire, equals 240 lbs.

A boll of barley, in Buteshire, equals 320 lbs.

A boll of oats, in Argyllshire, equals 6 bushels.

In South Wales, in place of liquor being sold in pints and half-pints, it is sold in an illegal measure called the "Blue" or "Sleever," which contains a third of a quart.

An Inspector recently informed me that in place of three measuring a quart, viz., 8 gills, that many only measure 7 gills, so their abolition would be a benefit to the poor man.

*Chairman*—continued.

2924. It has been said, of course, that admitting that there are a great number of these customary weights and measures which are at present illegal still in use, how would the adoption of a new standard or a new unit get rid of that anomaly that we are now suffering from; how would you answer that question?—No inspector would endeavour to put down the customary measures as he has the power to do, because he would handicap his own traders and his own ratepayers. Take my instance: we send to London a large quantity of milk.

2925. From Aylesbury?—From Buckinghamshire, by two special trains a day, and that milk is sold by the barn gallon to London wholesale milk buyers. If I were to abolish, as I have power to do, the barn gallon, I should handicap all the farmers in Buckinghamshire, to the advantage of farmers in Hertfordshire, and other counties. If an order came universally, that is to say, from the Board of Trade that every inspector was to put down customary measures, I feel certain that there are very few inspectors who would not immediately carry out the order; but when every inspector has the power to please himself, he is not likely at any rate to handicap his own ratepayers.

2926. And if a new unit, or system, were adopted, then would be the time to put a stop to these customary weights?—That is the whole point.

2927. Therefore, you do not agree that the customary measures would remain just as much, whether you adopt the new system or not?—The Act would have to be obligatory to remove all these local measures, as they assist unjust dealing, and do not give people a fair opportunity of trading.

2928. And there is no doubt that the customary measures only remain, because they do, in some instances, at any rate, give an advantage to the seller which the buyer is unacquainted with?—A great advantage. For instance, a farmer will sell his wheat by measure, but a dealer will accept that measure purely by weight. A man says he sells you a bushel of oats, but the dealer will want to know how many pounds, there are in that bushel. It is altogether deceptive trading.

Mr. *Stevenson.*

2929. Is it necessary to have the metric system in this country to abolish these customary measures?—It would require a new Act to make inspectors abolish them.

2930. But that might easily be got instead of establishing an entirely new system of weights and measures?—That would be a question for the House of Commons—not for me.

2931. Under what local authority do you act?—I act under the Buckinghamshire County Council.

2932. If they told you that you were to abolish these customary measures, and insist upon Imperial measures, could you not do that?—I should recommend them, as their officer, not to tell me to do so.

2933. But

Mr. *Stevenson*—continued.

2933. But you take your instructions from them?—Yes.

2934. If they so instructed you, you would do it?—Yes; I am there for that purpose.

2935. Without an Act of Parliament the county councils have it in their own hands now?—Yes, county councils, corporations, and other local authorities, if they would all act together.

Mr. *Godson.*

2936. If the old weights and measures were abolished I take it that somebody would get something out of it by having to replace them?—No doubt; but inspectors are precluded by the 1889 Act, from deriving any profit from selling, making, or adjusting weights, measures, and weighing instruments.

*Thursday, 27th June* 1895.

MEMBERS PRESENT:

Mr. Crombie.
Mr. Alban Gibbs.
Mr. Godson.
Sir Edward Hill.
Sir Samuel Montagu.
Sir Albert Rollit.
Sir Henry Roscoe.
Mr. James Stevenson.
Mr. Webster.

SIR HENRY ROSCOE, IN THE CHAIR.

The Right Honourable the Lord KELVIN (attending by special permission of the House of Lords), Examined.

*Chairman.*

2937. As the Committee know, you have devoted a very considerable amount of time and attention to the question which the Committee has to consider, namely, to inquire whether any and what changes in the present system of weights and measures should be adopted. I would ask you only quite a few general questions. First of all we have been given to understand, and I presume you will tell us if it is so, that for scientific purposes, to begin with, the system of weights and measures adopted in this country, as compared with what is known as the metrical system, is one in reference to which our system is very much inferior in simplicity?—It is very much inferior to it in simplicity.

2938. And that it has been found to be so much so that in all countries all scientific work is practically carried out by the metrical system of weights and measures?—That is so. We have been driven to it in England for scientific work. We find it a very great inconvenience that we are obliged to use the metrical system for scientific work, while we have a non-scientific system of the ordinary English weights and measures also to take into account, whereby an immense amount of waste labour is entailed.

2939. But, of course, assuming it to be the fact that scientific men have found it necessary or advisable to adopt entirely the metrical system, can you tell us anything, from your general experience of the value of that system for commercial and professional works, of other kinds than the purely scientific work?—For merely commercial work, for engineering work, and for everything connected with land surveying, the metrical system is infinitely better.

2940. Would you like to see the metrical system made compulsory in this country after a while?—Certainly.

2941. It has been brought before us that other countries have adopted the same system without any very great difficulty, and that the change, when once made, was appreciated by all classes of the population in those countries; do you see any reason to believe that if the same plan were adopted in this country there would be a similar appreciation by the general public of the system as introduced?—I believe there would be, and I believe that the difficulty of making the change has been enormously exaggerated. I believe that in a fortnight people would become so much accustomed to the perfect simplicity and easy working under the metrical system that they will feel that instead of its being a labour to pass from the one system to the other, it would be less than no labour, that is to say, it would be a very great saving of labour after the first day or two of beginning to use the metrical system.

*Chairman*—continued.

2942. It has been proposed or suggested that the use of the metrical system for all purposes should first be made legal, and that only after a while the adoption of it as a compulsory system should be enacted; would that meet with your approbation?—Yes. I think it would be better to let it come gradually to some degree, but to look forward to a not at all distant time when the metrical system shall be compulsory for all contracts in this country.

2943. You would not be satisfied with placing the two systems on an equality as regards the law?—Not except for a short time; I do not say how long; a few months, perhaps a year, perhaps a little more than a year; but I would not be satisfied without a thorough adoption of the metrical system of weights and measures as the only legal system in this country.

2944. That would place us, then, on the same footing as almost all other civilised countries, with one or two exceptions?—Yes.

2945. The question has been brought before us, or the statement has been brought before us, that English trade, especially with foreign countries using the metrical system, is handicapped to a considerable extent by our not adopting the same system; have you any experience on that matter, or could you give us, from your knowledge, any evidence bearing on that point?—I know that the trade in this country in scientific instruments

*Chairman*—continued.

instruments suffers very much from the use of feet, inches, and yards in its relations to the foreign users of instruments. I know that engineers in this country suffer very much through the usage in drawing offices of having contracts worked out according to British measures, and the extreme complication of the system to be followed, and that when they are called upon for foreign orders they lose very much in not being accustomed to make all their work according to the metrical system. British engineers can and will undertake to work to the metrical system, but their tools and their workmen are all accustomed to the other system; and it is a very considerable loss to them to have to carry on the dual system in their workshops.

2946. Do you think that the dual system is one that it is not advisable to see permanently established?—Certainly not.

2947. We have had evidence from two distinguished engineers, fellows of the Royal Society, on this subject, somewhat diametrically opposed. Sir Frederick Bramwell, on the one hand, thinks that the adoption of the metrical system would not be an advantage, and Sir Benjamin Baker, on the other hand, thinks that it would be a very great advantage, not only to the engineering profession and trade, but to the general public. You have expressed your views, and now can you tell us from your experience whether the one view or the other is more generally adopted by engineers and the profession?—I believe that Sir Benjamin Baker's view is more generally adopted, and that his opinion is more generally agreed to by practical engineers now than Sir Frederick Bramwell's would be.

2948. And you think that there would not be any great objection on the part of that particular profession to the adoption of the metrical system?—I feel quite sure that there would not be.

2949. Then we are told by Sir Frederick Bramwell that especially with regard to mental arithmetic, on the importance of which he lays great stress, that in his view such calculations, for engineering purposes especially, are more readily made by the present system and under the Imperial system of weights and measures, than they could be by the decimal system and by the metrical system; is that borne out by your experience?—I cannot agree with my friend Sir Frederick Bramwell. When I think of 14 lbs. in the stone, and when I think of hundredweights, quarters, and pounds, I cannot think that engineers, working in their heads without paper before them, will find that more convenient than a simple uniform system in which a certain number of kilogrammes has to be determined, or a certain number of tons at the rate of 1,000 kilogrammes to the ton. Again, when an engineer has to make an estimate of earthwork, for example; an English engineer has to find the number of cubic yards of earth-work to be taken away, so as to level a field of 3¼ acres, when the distance to which it is to be cut down in the process of levelling is stated in feet and inches. What can be more monstrously absurd, more wantonly brain-wasting than that system? Sir Frederick Bramwell has an advantage over, perhaps, every living man in the great ability



*Chairman*—continued.

and in the clearness of mind with which he works, notwithstanding that tremendous difficulty. I think that the proposed change would have this effect, that other men would be able to do calculations, not so well, or so accurately, or so quickly as Sir Frederick Bramwell, working in their heads; but I believe that other men would more nearly approach to Sir Frederick Bramwell's accuracy and readiness if we had a simple system: than they do approach to him on the complicated system that we have. It would diminish the difference between Sir Frederick Bramwell and the rest of the world in such estimates.

2950. I venture to put that point to him; that is to say, that in his case the difference was due more to the personal equation than to a difference between the merits of the two systems, but that he would not admit; is there any other point on which you would wish to inform the Committee as to your views on the matter?—The first merit of the metrical system is its oneness, if I may coin a word for the occasion, just one system for every kind of weight that has to be told. Contrast that with our avoirdupois system, and troy system, and apothecaries' weight also, which is different from either of the two others. Think of the room for mistakes that there is in the exceeding complications of those different systems. When you speak of a pound of gold, I believe you mean a pound troy, if you know what you mean at all. If you speak of a pound of iron we all know that that is a pound avoirdupois. It is monstrous and perverse to have those different systems of weights with the same name. I once nearly blew myself up over a mistake between them. I weighed out gunpowder two and a-half drams according to one system, and I found that gunmakers weighed by another system. There is an avoirdupois dram (27$\frac{11}{32}$ grains), and an apothecary's dram (60 grains), and if you weigh two and a-half drams of gunpowder according to the apothecaries' weight you will find that you put more than twice the charge of powder into your rifle that you intended to put.

2951. And you think that adopting the metrical system would gradually get rid of all those anomalies and absurdities?—It would instantaneously get rid of them all. The first advantage I was saying of the metrical system is its oneness; just one set of measures of a certain number of grammes, or 100 grammes, or 1,000 grammes; and if I may be allowed to point it out to the Committee, that is quite separate from the question of duodecimal notation. No one proposes to adopt the duodecimal system in general arithmetic, but if it were adopted, the metrical system of measures would be just as ready. An other great advantage of the metrical system is that the unit bulk of water weighs unity at the temperature of maximum density; a cubic decimetre of water called a litre weighs a kilogramme, a cubic metre of water weighs a thousand kilogrammes, or a metrical ton. A cubic centimetre of water weighs a gramme. There is a vast advantage in that.

2952. So that the specific gravity of bodies can be readily ascertained by their absolute

 weight?

*Chairman*—continued.

weight?—Yes; so that instead of having to remember the co-efficient involving the particular measure we are using (feet or inches) and the specific gravity, we have nothing to remember but the specific gravity. The brain of the engineer is cleared of all things to remember as to weights and measures, except the specific gravity. If he knows the specific gravity of earthwork he can calculate in a moment the weight of earthwork, the number of tons, to be taken away from a hectare of land cut down to the depth of a metre. While with us we have complicated co-efficients depending partly on the specific gravity of the substance, and partly on the particular measure, whether yard, foot, inch, mile, or acre. On the metrical system the one thing that has to be remembered for any such calculation is the specific gravity of the material.

2953. We have been told, and we read it in the Blue Books of Evidence, which has been given on this subject before Committees of the House in past years, that very distinguished scientific men, notably the late Astronomer Royal, Sir George Biddell Airy, and Sir John Herschel, have expressed very strong opinions in opposition to the adoption of the metrical system. I do not know whether you happen to be acquainted with the evidence which they gave, or whether you could assist us in any way to form an opinion as to how far that evidence applies to the present time. It is now 30 years since that evidence was given, and it is possible that what was then advisable may not be advisable now in view of the enormous increase in the use of the metrical system throughout the world?—I believe that those two great men would see things very differently now. Their minds had not been opened up to the great advantages of the metrical system. Since they gave that evidence every country in Europe has accepted the metrical system except ourselves, and the general understanding of these subjects has certainly advanced very much. One of Sir John Herschel's arguments in favour of the inch, for example, as compared with the metre, was that the diameter is a round number (500,000,000) of inches. I think if it had occurred to him to consider that we are more accustomed to journeys along arcs of the earth's surface than along a diameter through the centre he would see that his argument was all for the metrical system, which gives us round numbers of metres in the quadrant; 10,000 kilo-metres in the quadrant, which is much better than round numbers of inches in the diameter.

2954. Do you think that at the present moment a Committee in any investigation on this question should consider as being very important the objections which those distinguished men raised 30 years ago?—I think not now.

2955. There is only one further point that occurs to me as an objection which has been raised, and that is that there is great risk of error in using the decimal system; that is one argument that has been used; that the danger of making mistakes in calculation is greater when you are using the decimal system, owing to the fact that the point may happen to be removed from one side to the other, and thus increase or decrease by 10

*Chairman*—continued.

the amount; whereas when tons, hundredweights, quarters, and pounds are employed there is not so much danger of that. What do you say to that?—I think there is a much greater liability to error in the complicated system, and when an error is made it is much more difficult to correct it. If by any chance the decimal point is put one place to the right or to the left, it is easy to correct; but if an error by using troy weight instead of avoirdupois, or any error founded on the complication of our English system of weights and measures is made, it is difficult to find it; it does not show itself, and the whole work has to be gone over again. There is, I think, much greater danger of error in the complicated system that we have than in the simple metrical system.

2956. You agree, I suppose, with the statement that all calculations of whatever kind would be much simplified by the adoption of the metrical system than by our old system?—Yes.

2957. You are aware that the Committee has nothing to do with the question of the decimalisation of money?—Yes.

2958. Do you think that it would be possible to propose an alteration of the weights and measures of the country without at once attacking that question of the decimalisation of our coinage?—Yes, I do not think that the decimalisation of the coinage is at all necessary in connection with the adoption of a uniform system of weights and measures of the metrical system.

Mr. *Stevenson.*

2959. In regard to the universal use of the metrical system in science, is the metrical system used in navigation, or do they not still keep to the 360 degrees to the circle?—I am not speaking of the decimal system at all, I am speaking of the metrical system. The metrical system is not more necessarily connected with or disconnected from duodecimals than are our own methods. The degree of latitude is, very conveniently, the 90th part of a quadrant, for the good reason that the third of a right angle is the angle whose sine is one-half, and that the angles of an equilateral triangle are each of them two-thirds of a right angle. It would be very inconvenient, therefore, not to have round numbers for those important angles in trigonometry. Hence it is that the decimal division of the quadrants proposed by the great men who propounded the French metrical system was a failure.

2960. In regard to America, do you know that they have abandoned hundredweights, quarters, and stones; they carry on their trade in heavy materials in pounds, and tons containing 2,000 lbs. to the ton, and so simplify the calculations that you refer to?—I did not know that. It is a simplification but a somewhat weak method of simplifying, and the direct method is the adoption of the metrical system; they introduce, you see, still another ton. Then, again, the pound that they use, 2,000 lbs. to the ton, is that a pound avoirdupois or a pound troy?

2961. A pound avoirdupois?—Then the pound troy remains.

2962. The pound troy is abolished; it does not exist?——

2963. But

Sir *Samuel Montagu.*

2963. But the troy weights remain in America and here?—And apothecaries' weight and jewellers' weight.

Mr. *Stevenson.*

2964. Just one simple question in regard to earth-work: would an engineer begin by taking the specific gravity of his embankment before he made his calculation?—He must know that as it is; he cannot tell the weight of earth to be taken away, unless he knows the specific gravity of the earth.

2965. But he must dig it out first?—He can tell the cubic yards that he has to take away by a simple calculation, and if he knows the weight of the cubic yard he can tell the weight in tons.

Mr. *Stevenson*—continued.

2966. Does he know the cubic yards of the particular bits of excavation that he has to do until he has dug it out?—Yes; but the same bulk of earth, weighs differently in different places. If he wants to know how many tons are to be taken away, he has only to multiply the number of cubic metres by the specific gravity. If he only wants to know the number of cubic metres to be taken away he does not need to know the specific gravity.

*Chairman.*

2967. Is there any other matter that you would like to bring before the Committee?—I think not. I hope the Committee will be successful in getting the metrical system adopted.

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# APPENDIX.

## APPENDIX, No. 1.

PAPER handed in by Mr. *H. J. Chaney*, 26 February 1895.

LIST of Acts of Parliament relating to Weights and Measures.

Weights and Measures Act, 1878 (41 & 42 Vict. c. 49).

Weights and Measures Act, 1889 (52 & 53 Vict. c. 21).

Weights and Measures (Purchase) Act, 1892 (55 & 56 Vict. c. 18).

Weights and Measures Act, 1893 (56 & 57 Vict. c. 19).

Coal Mines Regulation Act, 1887 (50 & 51 Vict. c. 58).

Markets and Fairs (Weighing of Cattle) Act, 1887 (50 & 51 Vict. c. 27).

Markets and Fairs (Weighing of Cattle) Act, 1891 (54 & 55 Vict. c. 70).

Factory and Workshop Act, 1878 (41 & 42 Vict. c. 16).

Burgh Police (Scotland) Act, 1892 (55 & 56 Vict. c. 55).

Sale of Gas Act, 1859 (22 & 23 Vict. c. 66).

Sale of Gas Act, 1860 (23 & 24 Vict. c. 146).

Gas Works Clauses Act, 1871 (34 & 35 Vict. c. 41).

Coinage Act, 1870 (33 & 34 Vict. c. 10).

Coinage Act, 1891 (54 & 55 Vict. c. 72).

Sale of Coal (Metropolis) Act, 1831 (1 & 2 Will. IV. c. lxxvi) & (1 & 2 Vict. c. ci).

Sale of Bread Act, 1822 (3 George IV. c. cvi) (Metropolis).

Sale of Bread Act, 1836 (6 & 7 Will. IV. c. 37) (Great Britain).

Sale of Bread Act, 1838 (1 & 2 Vict. c. 28) (Ireland).

Local Government Act, (England and Wales), 1888 (51 & 52 Vict. c. 41).

Licensing Act, 1872 (35 & 36 Vict. c. 94).

Merchandise Marks Act, 1887 (50 & 51 Vict. c. 28).

Corn Returns Act, 1882 (45 & 46 Vict. c. 37).

Herring Fishery (Scotland) Act (52 & 53 Vict. c. 23).

36 George III., c. 88 (1796). Relating to the Sale of Hay and Straw within the Metropolis, or within 30 miles thereof.

4 Will. IV., c. 21 (1834). Relating to the Sale of Hay and Straw within the Metropolis, or within 30 miles thereof.

19 & 20 Vict. c. 114 (1856). Relating to the Sale of Hay and Straw within the Metropolis, or within 30 miles thereof.

## APPENDIX, No. 2.

PAPER handed in by Mr. *H. J. Chaney*, 26 February 1895.

RETURN of Weights and Measures stamped by the Local Inspectors of Weights and Measures in Great Britain and Ireland during 1893–94, for use in trade.

### GREAT BRITAIN.

| | *No.* | *No.* |
|---|---|---|
| WEIGHTS: | | |
| Avoirdupois (56 lbs. to ½ dram) | 3,390,063 | |
| Troy Bullion (500 ozs. to ·001 oz.) | 50,525 | |
| Apothecaries' (10 ozs. to ½ grain) | 77,690 | |
| TOTAL Number of Weights stamped | | 3,518,278 |
| MEASURES: | *No.* | |
| Capacity (bushel to ¼ gill) | 4,562,842 | |
| Apothecaries' (40 fluid ozs. to 10 minims) | 49,821 | |
| Length | 135,238 | |
| TOTAL Number of Measures stamped | | 4,747,901 |
| TOTAL Number of Weights and Measures stamped | | 8,266,179 |
| | | £. |
| *Fees* (for stamping only) | | 36,503 |

### IRELAND.

| | *No.* | *No.* |
|---|---|---|
| WEIGHTS: | | |
| TOTAL Number of Weights stamped | | 457,817 |
| MEASURES: | *No.* | |
| Capacity | 137,824 | |
| Length | 1,986 | |
| TOTAL Number of Measures stamped | | 139,810 |
| TOTAL Number of Weights and Measures stamped | | 597,627 |
| | | £. |
| *Fees* (for Stamping only) | | 3,859 |

## APPENDIX, No. 3.

PAPER handed in by Mr. *H. J. Chaney*, 26 February 1895.

STATEMENT showing the Systems of Weights and Measures in use in the various Countries.

(1.)—The Imperial System of Weights and Measures is in use for Trade in the following Countries :—

THE BRITISH EMPIRE.

| | | | |
|---|---|---|---|
| Europe | Gibraltar (*see* 3).<br>Great Britain and Ireland.<br>Maltese Islands. | America | Dominion of Canada (*see* 3).<br>Newfoundland.<br>Bermudas. |
| Asia | Cyprus.<br>Aden.<br>Socotra (*see* 3).<br>India (*see* 3).<br>Ceylon.<br>Straits Settlements (*see* 3).<br>Hong Kong.<br>Borneo (*see* 3). | | West Indian Islands :<br>Jamaica.<br>Trinidad.<br>Windward Islands (Barbados, St. Vincent, Grenada, Tobago, St. Lucia, &c.).<br>Bahama Islands (*see* 3).<br>British Honduras.<br>British Guiana.<br>Falkland Islands. |
| Africa | Cape Colony.<br>Natal.<br>Mauritius (*see* 3).<br>Seychelles, &c. (*see* 3).<br>Ascension (*see* 3).<br>St. Helena.<br>Gambia Settlements<br>Sierra Leone.<br>Gold Coast and Lagos. | Australia | Queensland.<br>New South Wales.<br>Victoria.<br>South Australia.<br>Tasmania.<br>New Zealand. |

*Note.*—Imperial Weights and Measures are also in use in the Orange Free State (*see* 3), Transvaal State (*see* 3).

(2.)—Metric System in use :—

| | | | |
|---|---|---|---|
| Europe | Austria.<br>Belgium.<br>Bulgaria (*see* "Turkey").<br>Finland.<br>France.<br>German Empire.<br>Greece (*see* 3).<br>Guiana, French (*see* 3).<br>Holland.<br>Hungary.<br>Italy.<br>Norway.<br>Portugal.<br>Roumania.<br>Servia (*see* 3).<br>Spain (and colonies—Cuba, &c.).<br>Sweden.<br>Switzerland.<br>Turkey (*see* 3). | Other Countries | Argentine Republic.<br>Bolivia.<br>Brazil (*see* 3).<br>Chili (*see* 3).<br>Colombia.<br>Costa Rica.<br>Ecuador.<br>Egypt (*see* 3).<br>Hayti.<br>Islands of S. Thomé and Principe.<br>Islands of Cape de Verde.<br>Mauritius (*see* 1 and 3).<br>Mexico (*see* 3).<br>Peru (*see* 3).<br>San Domingo.<br>Tunis.<br>Uruguay (*see* 3).<br>Venezuela (*see* 3). |

(3).—Other Systems are also in use in the following Countries :—

| | |
|---|---|
| Algeria | No information. |
| Ascension, Bahama Islands, Borneo | Local, as well as Imperial weights and measures. |
| Brazil | Local, as well as metric weights and measures. |
| Channel Islands | Jersey system. |
| Chili | Local, as well as metric weights and measures. |
| China | Chinese decimal system. |
| Cyprus | Local weights and measures, as well as Imperial system. |
| Denmark | Danish and metric systems. |
| Egypt | Egyptian, Turkish, and metric systems. |
| Gibraltar | Local and Imperial weights and measures. |
| Greece | Metric system, and old Turkish weights and measures. |
| Guiana (French) | Local and metric weights and measures. |
| India | Indian weights and measures. The metric system was introduced by the Indian Act, No. XI. of 1870, and the Act XXXI. of 1871, but does not appear to have been established for use in trade ; the Act XXXI. of 1871 provided only for the establishment of new weights and measures of capacity. In 1889, however, the "Measures of Length Act, 1889," received the assent of the Governor General, by which the British Yard, (and not the "Metre") was adopted as the standard of length. |
| Japan | Japanese decimal system. |
| Mauritius | Local, as well as Imperial and metric weights and measures. |
| Mexico | Local, as well as metric system. |
| Morocco | No information. |
| Orange Free State | Local, as well as Imperial weights and measures. |
| Persia | Persian system. |
| Peru | Metric system, old Spanish (same as Mexico), and weights of Imperial system. |
| Russia (exclusive of Finland) | Russian system. |
| Servia | Metric system, and old Turkish weights and measures. |
| Seychelles | Same as Mauritius. |
| Straits Settlements | Local, as well as Imperial weights and measures. |
| Transvaal | - - ditto - - - ditto. |
| Turkey | Turkish, as well as metric system. |
| Uruguay | Local weights and measures, as well as metric system. |
| Venezuela | Metric system, and old Spanish weights and measures. |

(3*a*.)—Imperial and Metric Systems optional in Trade :—

| | |
|---|---|
| Canada (Quebec, Ontario, New Brunswick, Nova Scotia, Prince Edward Island, Manitoba, British Columbia, N. W. Territory, &c.). | Weights and measures of Imperial system. The metric system was rendered permissive by 34 Vict. c. 24 (Canada), 1871, which was re-enacted by the Consolidating Act of 1873, and the Act gave equivalent values of Imperial and metric weights and measures, made the system legal in contracts and dealings, and empowered the Governor General to provide standards, and to make regulations for the verification of metric weights and measures. |
| United States | Weights and measures of British or Imperial system, and old Winchester measure of capacity. By an Act of Congress, approved in July 1866, the use of the weights and measures of the metric system is made permissible ; and all contracts are declared not to be invalid because the weights and measures expressed or referred to therein are weights and measures of that system. Metric standards to be furnished to each State : by a Joint Congressional Resolution of the same date, the Secretary of the Treasury was "authorised and directed to furnish each State with one set of the standard weights and measures of the metric system." Tables of equivalents are also recognised in the Act.<br>*Note.*—The "International Prototype Metre and Kilogramme" (deposited at Paris) are regarded as the fundamental standards of "Length and Mass" for geodetic purposes ; and the Yard and Pound are to be derived from the metric standards. |

(4.)—Metric System, permissive for certain purposes only :—

GREAT BRITAIN AND IRELAND.

Permissive by the "Weights and Measures Act, 1878," Secs. 18, 21, and 38, as follows :

18. The table in the Third Schedule to this Act shall be deemed to set forth the equivalents of Imperial weights and measures and of the weights and measures therein expressed in terms of the metric system, and such table may be lawfully used for computing and expressing, in weights and measures, weights and measures of the metric system.

21. A contract or dealing shall not be invalid or open to objection on the ground that the weights or measures expressed or referred to therein are weights or measures of the metric system, or on the ground that decimal subdivisions of Imperial weights and measures, whether metric or otherwise, are used in such contract or dealing.

38. Whereas the Board of Trade have obtained accurate copies of the metric standards mentioned in Part 2 of the Third Schedule to this Act, and it is expedient to make the provision hereinafter mentioned for the verification of metric weights and measures, be it therefore enacted as follows :—

The Board of Trade may; if they think fit, cause to be compared with the metric standards in their custody and verified all metric weights and measures which are submitted to them for the purpose, and are of such shape and construction as may be from time to time in that behalf directed by the Board of Trade, and which the Board of Trade are satisfied are intended to be used for the purpose of science or of manufacture, or for any lawful purpose not being for the purpose of trade within the meaning of this Act.

## APPENDIX, No. 4.

PAPER handed in by Mr. *H. J. Chaney*, 26 February 1895.

LIST OF BOARD OF TRADE STANDARDS.

### MEASURES.

Measures of Length :

100 feet.
66 feet, or a chain of 100 links.
Rod, pole, or perch.
10 feet.
6 feet.
5 feet.
4 feet.
3 feet.
2 feet.
18 inches.
1 foot.
Yard.
Half-yard.
Quarter-yard.
Eighth of a yard.
Sixteenth of a yard.
Nail.
Inch.

Measures of Capacity :

Liquid Measures :

Thirty-two gallons.
Thirty-one gallons.
Thirty gallons.
Twenty-nine gallons.
Twenty-eight gallons.
Twenty-seven gallons.
Twenty-six gallons.
Twenty-five gallons.
Twenty-four gallons.
Twenty-three gallons.
Twenty-two gallons.
Twenty-one gallons.
Twenty gallons.
Nineteen gallons.
Eighteen gallons.
Seventeen gallons.
Sixteen gallons.

Liquid Measures—*continued.*

Fifteen gallons.
Fourteen gallons.
Thirteen gallons.
Twelve gallons.
Eleven gallons.
Ten gallons.
Nine gallons.
Eight gallons.
Seven gallons.
Six gallons.
Five gallons.
Four gallons.
Three gallons.
Two gallons.
One gallon.
Half-gallon.
Quart.
Pint.
Half-pint.
Gill.
Half-gill.
Quarter-gill.

Dry Measures :

Four bushels.
Bushel.
Half-bushel.
Peck.
Gallon.
Half-gallon.
Quart.
Pint.
Half-pint.

Apothecaries' Measures :

40 fluid ounces, to half a fluid ounce.
16 fluid drachms, to half a fluid drachm.
60 minims, to 1 minim.

### WEIGHTS.

Avoirdupois Weights :

Cental, or 100 pounds.
56 pounds, or half-hundredweight.
28 pounds, or quarter-hundredweight.
14 pounds, or stone.
7 pounds.
4 pounds.
2 pounds.
1 pound, or 7,000 grains.
8 ounces, or half-pound.
4 ounces, or quarter-pound.
2 ounces.

Avoirdupois Weights—*continued.*

1 ounce, or 437½ grains.
8 drams, or half-ounce.
4 drams, or quarter-ounce.
2 drams.
1 dram.
½ dram.
240 grains, commonly called 10 pennyweights.
120 grains, commonly called 5 pennyweights.
72 grains, commonly called 3 pennyweights.
48 grains, commonly called 2 pennyweights.
24 grains, commonly called 1 pennyweight.

WEIGHTS—*continued.*

Troy Bullion Weight :

Decimal Troy Ounce Bullion Weights :

500 ounces, troy.
400 ounces, troy.
300 ounces, troy.
200 ounces, troy.
100 ounces, troy.
50 ounces, troy.
40 ounces, troy.
30 ounces, troy.
20 ounces, troy.
10 ounces, troy, or 4,800 grains.
5 ounces, to 0·001 ounce.

Apothecaries' Weight :

10 ounces.
8 ounces.
6 ounces.
4 ounces.
2 ounces.
1 ounce, or 480 grains.
4 drachms, or half an ounce.
2 drachms.
1 drachm.
2 scruples.
1½ scruples, or half a drachm.
1 scruple.
Half a scruple.
6 grains.
5 grains.
4 grains.
3 grains.
2 grains.
1 grain.
Half a grain.

Grain Weights :

4,000 grains.
2,000 grains.
1,000 grains.
500 grains.
300 grains.
200 grains.
100 grains.
50 grains, to 0·01 grains.

Coin Weights of the Current Coins of the Realm.

Gauges :

Whitworth external and internal cylindrical gauges, and external plane gauges.
Wire gauge (B.W.G.).

Gas Measuring Standards :

20 cubic feet gasholder.
10 cubic feet gasholder.
5 cubic feet gasholder.
1 cubic foot gasholder.

Units of Electrical Measurements :

The Ohm.
The Ampère.
The Volt.

## APPENDIX, No. 5.

### PAPERS handed in by Mr. *Dowson*, 5 March 1895.

### TABLE A.

### COUNTRIES which have Adopted the Metric Weights and Measures.

| | Name of Country. | Population. | Date of Last Return |
|---|---|---|---|
| 1 | Argentine Republic | 4,257,000 | 1892 |
| 2 | Austrian Territories | 41,358,886 | 1890 |
| 3 | Belgium | 6,195,355 | 1892 |
| 4 | Bolivia | 1,192,162 | 1888 |
| 5 | Bulgaria | 3,305,458 | 1893 |
| 6 | Brazil | 14,002,335 | 1888 |
| 7 | Central America | 3,053,000 | — |
| 8 | Chili | 3,317,264 | 1892 |
| 9 | Columbia | 3,878,600 | — |
| 10 | Ecuador | 1,271,861 | — |
| 11 | Finland | 2,380,140 | 1890 |
| 12 | France | 38,343,192 | 1891 |
| 13 | French Dependencies | 43,741,544 | — |
| 14 | Germany | 49,428,470 | 1890 |
| 15 | Greece | 2,187,208 | 1889 |
| 16 | Haiti | 572,000 | — |
| 17 | Holland | 4,669,576 | 1892 |
| 18 | Italy | 30,535,848 | 1892 |
| 19 | Italian Dependencies | 6,258,800 | 1892 |
| 20 | Japan | 40,718,677 | 1891 |
| 21 | Java, &c. | 32,000,000 | 1891 |
| 22 | Mauritius | 371,655 | 1891 |
| 23 | Mexico | 11,642,720 | 1891 |
| 24 | Norway and Sweden | 6,817,782 | 1891–92 |
| 25 | Ottoman Empire | 39,212,000 | — |
| 26 | Peru | 2,621,844 | — |
| 27 | Portugal | 4,306,554 | 1881 |
| 28 | Portuguese Dependencies | 5,772,824 | 1884 |
| 29 | Roumania | 5,800,000 | 1893 |
| 30 | Saint Domingo | 610,000 | 1888 |
| 31 | Servia | 2,226,741 | 1893 |
| 32 | Spain | 17,565,632 | 1887 |
| 33 | Spanish Dependencies | 9,695,567 | 1887 |
| 34 | Switzerland | 2,933,734 | 1888 |
| 35 | Uruguay | 728,447 | 1892 |
| 36 | Venezuela | 2,323,527 | 1891 |
| | TOTAL | 445,296,003 | |

## Table B.

### Metric Weights and Measures.

#### Measures of Length.

| | | Equal to | |
|---|---|---|---|
| | | Inches. | Feet. |
| Metre | Fundamental unit of weights and measures. | 39·3708 | 3·280 |
| Decimetre | One tenth (·1) of a metre | 3·9370 | ·328 |
| Centimetre | One hundredth (·01) of a metre | ·3937 | ·033 |
| Millimetre | One thousandth (·001) of a metre | ·0394 | ·003 |

(*For long distances, a kilometre is used for* 1,000 *metres.*)

#### Measures of Surface.

| | | Equal to | |
|---|---|---|---|
| | | Square Feet. | Square Yards. |
| Square metre | 100 square decimetres | 10·7643 | 1·196 |
| Square decimetre | 100 square centimetres | ·1076 | ·012 |
| Square centimetre | 100 square millimetres | — | — |

(*In measuring land, one are is used for* 100 *square metres, and one hectare for* 100 *ares, or* 10,000 *square metres.*)

#### Cubic, or Solid Measures.

| | | Equal to Cubic Feet. |
|---|---|---|
| Cubic metre | 1,000 cubic decimetres | 35·316 |
| Cubic decimetre | 1,000 cubic centimetres | ·035 |
| Cubic centimetre | 1,000 cubic millimetres | — |

(*The stère is in some cases used for one cubic metre.*)

#### Measures of Capacity.

| | | Equal to | |
|---|---|---|---|
| | | Cubic Inches. | Pints. |
| Litre | 1,000 cubic centimetres, or one cubic decimetre. | 61·027 | 1·760 |
| Decilitre | 100 cubic centimetres | 6·103 | ·176 |
| Centilitre | 10 cubic centimetres | ·610 | ·017 |
| Millilitre | 1 cubic centimetre | ·061 | ·002 |

(*The hectolitre is used for* 100 *litres. One cubic metre* = 1,000 *litres.*)

#### Weights.

| | | Equal to Grains. |
|---|---|---|
| Gram | Weight of 1 cubic centimetre of water as its greatest density. | 15·4323 |
| Decigram | One tenth (·1) of a gram | 1·5432 |
| Centigram | One hundredth (·01) of a gram | ·1543 |
| Milligram | One thousandth (·001) of a gram | ·0154 |

1 cubic centimetre of water = 1 gram.
10 cubic centimetres of water = 10 grams.
100 cubic centimetres of water = 100 grams.
1 cubic decimetre or 1 litre of water = 1,000 grams = 1 kilogram.
1 cubic metre or 1,000 litres of water = 1,000 kilograms = 1 metric ton.

TABLE C.

## ENGLISH WEIGHTS.

### ADDITION.

| | *Tons.* | *cwt.* | *qr.* | *lb.* |
|---|---|---|---|---|
| Add together | 1 | 19 | 3 | 20 |
| | 3 | 16 | 2 | 16 |
| | 4 | 9 | 1 | 18 |
| | 5 | 11 | 3 | 15 |
| Ans. | 15, | 17, | 3, | 13 |

### SUBTRACTION.

| | *Tons.* | *cwt.* | *qr.* | *lb.* |
|---|---|---|---|---|
| From - - | 1 | 11 | 2 | 3 |
| Subtract - | | 18 | 3 | 26 |
| Ans. | | 12 | 2 | 5 |

### MULTIPLICATION.

*Tons. cwt. qr. lb.*

Multiply 16 18 3 21 by 78

20

338
4

1355
28

10861
2710

37961
78

303688
265727

28)2960958(105748 qrs.
28

160
140

209
196

135
112

238
224

14 lb.

4)105748

2,0)2643,7

1321,17

| | *Tons.* | *cwt.* | *qr.* | *lb.* |
|---|---|---|---|---|
| Ans. | 1321 | 17 | 0 | 14 |

## METRIC WEIGHTS.

### ADDITION.

| | *Kilograms.* |
|---|---|
| Add together | 2032·72 |
| | 3901·82 |
| | 4551·82 |
| | 5695·91 |
| Ans. | 16182·27 |

### SUBTRACTION.

| | *Kilograms.* |
|---|---|
| From - - | 1605·00 |
| Subtract - | 966·36 |
| Ans. | 638·64 |

### MULTIPLICATION.

| | *Kilograms.* |
|---|---|
| Multiply - | 17255 |
| by - - | 78 |
| | 138040 |
| | 120785 |
| Ans. | 1345890 kilos. |

## Another Method of Working.

*Tons. cwt. qrs. lbs.*

16 18 3 21
10

169 9 1 14
7

1186 5 2 14
135 11 2 0

Ans. 1321 17 0 14

### DIVISION.

*Tons. cwt. qr. lb.*

Divide 16 18 3 21 by 78

20

338
4

1355
28

10861
2710

78)37961(486$\frac{53}{78}$ lb.
312

676
624

521
468

53

28)486(17 qrs
28

206
196

10

4)17

4.1

*Cwt. qr. lb.*

Ans. 4 1 10$\frac{1}{4}$

### DIVISION

Divide 17255 kilograms by 78

78)17255(221·21
156

165
156

95
78

170
156

140
78

62

*Kilograms.*

Ans 221·21

## Table D.

Give the cost of 215 tons 17 cwt. 3 qr. 9 lb., at £9 11*s.* 6*d.* per ton.

| *Cwt.* | *Tons.* | *cwt.* | *qr.* | *lb.* | £. | *s.* | *d.* |
|---|---|---|---|---|---|---|---|
| 20 | 215 | 17 | 3 | 9 | 9 | 11 | 6 |
| 4 | 20 | | | | 20 | | |
| 80 | 4317 | | | | 191 | | |
| 28 | 4 | | | | 12 | | |
| 640 | 17271 | | | | 2298 pence. | | |
| 160 | 28 | | | | | | |
| 2240 lb. per ton | 138177 | | | | | | |
| | 34542 | | | | | | |
| | 483597 | | | | | | |
| | 2298 | | | | | | |
| | 3868776 | | | | | | |
| | 4352373 | | | | | | |
| | 967194 | | | | | | |
| | 967194 | | | | | | |

224,0 ) 111130590,6 ( 496118 pence
896
2153
2016
1370
1344
265
224
419
224
1950
1792
158

$$\frac{158}{224} = \frac{3}{4} \text{ pence}$$

12 ) 496118

2,0 ) 4134,3 2

2067 3 *Ans.* 2,067 3*s.* 2¾*d.*

*The same worked by Practice :—*

| | £. | *s.* | *d.* |
|---|---|---|---|
| 215 tons at £9 a ton = | 1,935 | – | – |
| „ 10*s.* = (½ of £) | 107 | 10 | – |
| „ 1*s.* = (1/10 of 10*s.*) | 10 | 15 | – |
| „ 6*d.* = (½ of 1*s.*) | 5 | 7 | 6 |
| £. | 2,058 | 12 | 6 |

| | £. | *s.* | *d.* |
|---|---|---|---|
| 215 tons at £9 11*s.* 6*d.* a ton = | 2,058 | 12 | 6 |
| 10 cwt. = ½ of 1 ton | 4 | 15 | 9 |
| 5 cwt. = ½ of 10 cwt. | 2 | 7 | 10½ |
| 2 cwt. = 1/10 of a ton | – | 19 | 2 |
| 2 qr. = ¼ of 2 cwt. | – | 4 | 9½ |
| 1 qr. = ½ of 2 qr. | – | 2 | 4¾ |
| 7 lb. = ¼ of qr. | – | – | 7¼ |
| 2 lb. = 1/14 of 1 qr. | – | – | 2 |
| £. | 2,067 | 3 | 3 |

Note.—*The mental calculations involved in this example are not shown.*

Give the cost of 375620 kilograms at £8 4*fl.* 5*c.* per 1,000 kilos.

375·620
8·45
1878100
1502480
3004960
3173·98900

*Ans.* £3,173 9*fl.* 89*c.*

## Appendix E.

### Extracts from recent British Consular Reports.

*Rotterdam.*

22nd October, 1894.—"The simplicity of the decimal system is so obvious, that its adoption in England cannot fail to be of great advantage to all interested in the trade with those countries where it already is in vogue."

*Milan, Italy.*

18th October 1894.—"As an engineer of some 20 years' residence upon the Continent, I have no hesitation whatever in stating that the present system of English weights and measures is detrimental to British commercial interests in countries like this, where the decimal and metrical system is in force.

The sooner the decimal system is adopted by Great Britain, the more advantageous for her commercial interests, when trading with the Continent in particular, as also to facilitate home calculations, especially in engineering departments, where excessive accuracy is an absolute necessity."

*Varna.*

23rd October 1894.—"If the quotations and specifications in trade lists are made out in English standards of weights and measures, intending purchasers here generally throw them aside and consult others which give the required information in metres, kilogrammes, &c.

In the Varna Trade Report for 1892, it is mentioned that it is especially in hardware and machinery that the non-adoption of the metrical system acts most prejudicially against British manufactured goods.

Commission agents here have repeatedly told me that though they represent British firms also, they have, when a customer requires precise data as to the working and capabilities of a machine, to refer to some rival foreign maker's catalogue, with the result that the order is often placed with the latter.

Not long ago a man came to me with the price list of a British machinery maker, and I converted for him the specifications into their metrical equivalents. He then said that the machine in question seemed just what he wanted, and that he would order one for trial, and give repeat orders if it turned out satisfactory. Meeting him again some time after, he told me that although he would have preferred buying the English machine, he had imported one of German make, firstly, because he could not be bothered with recurring calculations based on an unfamiliar system, and secondly, because the measurements did not properly coincide with his existing machinery plant of Continental make."

*Constantinople.*

22nd October 1894.—"There is no doubt that the complicated and puzzling system of weights and measures still obtaining in England is long out of date, and has become more and more of an anachronism as England has increased her foreign trade.

Personally, I have, during my long official career, seen so frequently the inconvenience of the old system, that I have for very many years been a convert to the ideas of your Association."

*Rouen.*

24th October 1894.—"Within the past 16 years, I have served as Her Majesty's Consul in three countries using the metric and decimal system, and I have not unfrequently had occasion to observe the maze into which an English trade prospectus or circular, if drawn up only on the British system, throws a foreigner accustomed from childhood to the perfect simplicity of the metric system. And there is no doubt in my mind that the uncertainty and confusion thus created, at times leads to the rejection by a would-be purchaser of a British manufacturer's circular or offers of sale."

"The British Customs Tariff is a model of brief simplicity, and yet we are often called upon to explain it. Within the past month, I have been asked to explain 'what a duty of 14*s.* 6*d.* a gallon means' and what is 7*s.* a cwt. for dried fruit?—That is to say, what are their equivalents in metric weights and measures and decimal currency. Foreign exporters to the United Kingdom would be thankful for a simple table of the British Customs Tariff in which the equivalent duties and units of Continental metric systems were shown in parallel columns beside our own.

*Flushing.*

20th October 1894.—"The adoption of the metric system of weights and measures in Great Britain and her dependencies would, to my conviction, greatly benefit English manufacturers and tradesmen, and would certainly contribute to facilitate and extend business with this country."

*Marseilles.*

23rd October 1894.—"Very often French merchants have complained of the great difficulty they had in reducing English weights or measures into those of the metric system, and I have not the slightest doubt that if the said system was adopted in England, it would greatly facilitate trade with this country."

*Algiers.*

24th October 1894.—"I have no doubt whatever that our antiquated and most irrational system has had an injurious effect wherever it has been employed."

*Vienna.*

26th October 1894.—"I believe the adoption of the metric system of weights and measures in Great Britain and her dependencies would highly benefit English importers and exporters."

*Malaga.*

23rd October 1894.—"I have heard purchasers here say that they bought German goods in preference to English ones because German merchants sent out their price lists made out with the prices in Spanish currency and weights according to the metric system, whereas the British merchant al vays sent his made out according to English weights and currency.

I consider that British trade with Spain would increase if we adopted the metric system."

*Cherbourg.*

27th October 1894.—"I am convinced that if a metrical system of measurement and a decimal system of coinage were established in England, it would materially benefit British trade, especially with those countries, such as France, where those systems are adopted."

*Lisbon.*

24th October 1894.—"I am of opinion that our industries are materially handicapped in the competition with foreign manufacturers by the isolation of our system of weights and measures.

The small tradesmen are therefore the real representatives of trade abroad, or at all events are fast becoming so. We should therefore cater to their requirements, and cultivate their custom, for their friendship to the full extent of the word is of 'value' to us.

In this regard I think I may safely say that to the tradesmen of foreign countries our system of weights and measures is a constant stumbling-block, and acts as a deterrent. Not one in a thousand understands it, and rather than suffer the perplexity of it, or risk the loss that an erroneous computation would entail, he passes on to our neighbours who speak and write to him in his native language of metres and kilos. He thereby knows what he buys, knows what he has to clear through the Custom House, without risk of fine or forfeiture, and knows the length and cube which leaves him a profit when he sells.

For these reasons I doubt not but that we lose in the aggregate much valuable trade."

*Roustchouk, Bulgaria.*

19th November 1894.—"I know of cases where British trade has suffered because English goods offered for sale here have been made to English instead of metric weights and measures.

In textiles, all the British firms having establishments here have found it to their interests to have their pieces measured in Manchester, and labelled there to a scale of metres. Woollen cloths mostly come from Germany. An importer for whom I had obtained samples of Scotch tweeds, informed me that he found so much bother about the calculations that no business resulted.

Since the Bulgarian Government adopted the metric system, it is evident that the metre has a great advantage, and it is a fact that British imports have fallen off, while Austrian and German have increased."

*Leghorn.*

16th November 1894.—"I have personally had one practical experience of the drawbacks of our system of measures. The Italian Customs duty on spirits in bottles is fixed for bottles containing half a litre, or a litre. Any quantity between the two pays duty as for a litre bottle. The ordinary English bottle contains less than a litre, and consequently there is an unnecessary loss in the duty paid on all bottles imported.

The leading English merchants here whom I have consulted on the subject are all of opinion that the introduction into England of a metrical system of weights and measures would greatly tend to benefit English commerce abroad. Indeed, so self-evident are the advantages of the system, that its adoption in England can only be regarded as a matter of time."

*Bahia.*

23rd November 1894.—"After careful consideration, I have to state as follows :—

Question No. 1.—"Decidedly in many cases English exporters find themselves handicapped by their quotations being made in English weights and measures, and, as a proof of the preference buyers here have for the metric system, I may mention that all goods imported to this place are marked in yards and metres, and in lbs. and kilos. where weights are requisite."

Question No. 2.—"Dealers here will often throw down an English catalogue or price list owing to the difficulty they experience in calculating the cost of goods per metre or per kilo, when the quotations are made per yard or pound."

Question No. 3.—"Whether English trade would benefit by the adoption in England of metric weights and measures I am hardly able to state, the question being one of pure competition, but that the opportunity and facility for competing with foreign trade would be better, I feel quite assured of."

*Turin.*

1st January 1895.—"Several cases of misunderstanding between English and Italian firms have been caused by the difference of the systems of weights and measures. Many Italian merchants find a great difficulty in making up the reduction of their invoices into the English system, and also in understanding the invoices of English merchants. The decimal system is so plain and generally used that I strongly hope to see it adopted as soon as possible."

*Tokio.*

19th December 1894.—"I believe most confidently that the adoption of metric weights and measures for English manufactures would be of benefit so far as regards their import into Japan."

FROM the British Chamber of Commerce of Turkey.

*Constantinople.*

2nd November 1894.—"There is no doubt that, if the metric system were adopted in England, it would, in a very great measure, facilitate commercial transactions between this and that country, inasmuch as the kilo and the metre are almost invariably used here in all sections of trade ; moreover, the Turkish Government have adopted the kilo as their official standard of weight.

An English trader doing business with this country is clearly placed at a serious disadvantage compared with his French, Austrian and German competitors, who, with their kilo and metre, are better able to strike their bargains than the Englishman, who has first to convert his weights and measures into their metric equivalents.

Considering that British trade is being closely pressed by foreign competition, it is essential that anything which tends to make operations difficult should be removed, and we feel sure that, at least so far as this country is concerned, our complex system of weights and measures cannot but militate in a degree against our trade.".

## Appendix F.

### Brief Account of the introduction of the Metric Weights and Measures in *Germany*.

The first movement for the introduction of the metric weights and measures into Germany dates from before the year 1860. A Commission of experts was then appointed by Austria, Bavaria, Saxony, Hanover, Wurtemberg, Baden, the Grand Duchy of Hesse, Oldenberg, Nassau, and the three Hanse towns, to consider the reform and unification of German weights and measures. The report of this Commission was laid before the Federal Assembly at Frankfort on the 30th April 1861; it recommended the meter as the basis of a decimal system of weights and measures, and explained fully the reasons which made it preferable to any other unit.

A proposal based on this report was introduced in the Federal Assembly in 1865, and an Act practically identical with this proposal was finally adopted by the Reichstag of the North German Confederation on 17th August 1868. The chief provisions of this Act, which in an amended form is still in force, are as follows :—

Article 1.—The basis of weights and measures is the meter or stab, with decimal divisions and multiples.

Article 2.—The platinum bar, in the possession of the Royal Prussian Government, and which in 1863 was compared by a Franco-Prussian Commission, with the *metre des archives* at Paris, is taken as standard measure. This Prussian standard was found to equal 1·00000301 meter, at the temperature of melting ice.

Article 3.—The following measures are to be used :—

A. Measures of Length.—The unit is the meter or stab. The hundredth part of a meter is called a centimeter, or Neu Zoll (new inch), and the thousandth part of a meter is called a millimeter or Strich (line) ; ten meters are called a dekameter or kelte (chain) ; one thousand meters are called a kilometer.

B. Measures of Surface.—The unit is the square meter or square stab ; one hundred square meters are called an ar ; ten thousand square meters are called a hektar.

C. Measures of Capacity.—The basis of these is the cubic meter or cubic stab. The unit is the thousandth part of a cubic meter, and is called a liter or Kanne (can) ; half a liter is called a schoppen (pint) ; one hundred liters, or the tenth part of a cubic meter, are called a Hektoliter or Fass (barrel) ; fifty liters are one Sheffel.

Article 4.—As a measure of distance, there is to be a mile equal to 7,500 meters.

Article 5.—The standard weight is to be the platinum kilogram, marked No. 1, in the possession of the Prussian Government, and which in the year 1860, was compared by a Commission appointed by the French and Prussian Governments, with the kilogramme prototype preserved in the Imperial Archives at Paris, and found to equal 0·999999842 kilogram.

Article 6.—The unit of weight is to be the kilogram, equal to two pounds (Prussian). It is the weight of one liter of distilled water at 4 degrees centigrade. The kilogram is divided into 1,000 grams, with decimal sub-divisions. Ten grams are to be called a dekagram, or Neu Loth (new ounce). The tenth part of a gram is called a decigram, the hundredth part a centigram, and the thousandth part a milligram. One half of a kilogram is called a pound. Fifty kilograms, or 100 pounds, are called a Zentner (hundredweight). One thousand kilograms, or 2,000 pounds, are called a ton.

Article 7.—No system of apothecary's weights differing from the above is to exist.

Article 8.—With regard to the weight of precious metals for minting purposes, the provisions of the Coinage Treaty of 24th January 1857, remain in force.

Articles 9 to 20.—Deal with the testing and marking of weights and measures.

Article 21.—This Act respecting weights and measures is to come into force on 1st January 1872. The Governments of the countries forming the North German Confederation are to ascertain and publish the co-officients for converting the old local weights and measures into the new, and are to issue decrees to insure the executions of the provisions of this Act.

Article 22.—The use of the weights and measures prescribed by this Act is to be admissible on and after the 1st January 1870, if the parties concerned agree to this.

Article 23.—The Testing Commission is to begin its labours at once, in order that the necessary weights and measures may be available at the date named in Article 22.

On 7th December 1873, a short Act was passed abolishing Article 4 above quoted—viz., the one establishing a mile of 7,500 meters as a measure of distance ; since then the kilometer alone has been used.

On 11th July 1884, a further Act was passed, making certain alterations in Articles 1, 3, 6, and 14 of the Act of 1868. In these the denomination pound is omitted, and some of the definitions are amended ; otherwise there is no material change.

Further amendments to Articles 1, 2, 3, and 5 of the Act of 1868, were made by an Act passed on 26th April 1893. This was consequent on the action of the International Bureau of Weights and Measures, established by the Metric Convention of 20th May 1875. This Act of 26th April 1893, provides that Articles 1, 2, 3, and 5 of the Act respecting weights and measures is to be read, as follows :—

Article 1.—The meter and the kilogram are to form the basis of the system of weights and measures. The meter is the unit of length. It is represented by the distance (at the temperature of melting ice), between the terminal lines marked on the measure which has been accepted by the General International Conference for Weights and Measures, as the international prototype of the meter, and which is deposited in the International Bureau for Weights and Measures.

Article 2.—The standard measure is to be the bar of platinum and iridium, copied from the prototype meter, which the General International Conference for Weights and Measures has presented to the German Empire as the national prototype. This standard measure is in the possession of the Normal Testing Commission.

Article 3.—From the meter are derived the units for the measures of surface and capacity-square meters and cubic meters. The sub-divisions and multiples of these units are named, as follows :—

A. Measures of Length.—The thousandth part of a meter is a millimeter, the hundredth part a centimeter. One thousand meters are called a kilometer.

B. Measures of Surface.—One hundred square meters are called an ar. Ten thousand square meters, or 100 ars, are called a hektar.

C. Measures of Capacity.—The thousandth part of a cubic meter is considered equal to the space occupied by one kilogram of pure water, at its greatest density, and under the absolute pressure of one atmosphere. This measure is called a liter. The hundredth part of a cubic meter, or 100 liters, is called a hektoliter. Surface or capacity can also be measured by the squares or cubes of the centimeter and millimeter.

Article 5.—The standard of weight is to be the kilogram of platinum and iridium, taken from the prototype kilogram (Article 1, Clause 3), which the General International Conference for Weights and Measures has presented to the German Empire, as the national prototype. This standard weight is in the possession of the Normal Testing Commission.

## Appendix G.

### Trades Councils in Favour of the Metric Weights and Measures.

United Bargemen and Watermen's Protection Society.
General Secretary - - - - - - - Mr. C. F. Ashton.

South Side Labour Protection League.
President - - - - - - - - - Mr. W. J. Brett.

Street Masons', Paviors', Stonedressers', and Hammermen's Amalgamated Union.
General Secretary - - - - - - - Mr. I. J. Chapman.

Working Men's Club and Institute Union (Limited).
Secretary - - - - - - - - - Mr. J. J. Dent.

United Trades Council, Bolton.
Secretary - - - - - - - - - Mr. J. T. Fielding.

Sheffield Trades Council.
President - - - - - - - - - Mr. C. Hobson.

Glasgow Trades Council.
Secretary - - - - - - - - - Mr. A. J. Hunter.

National Union of Gasworkers and General Labourers of Great Britain and Ireland.
President - - - - - - - - - Mr. M. Hutchins.

Boot and Shoe Trade Union, Leicester.
Secretary - - - - - - - - - Mr. W. Inskip.

Amalgamated Society of Lithographic Printers.
General Secretary - - - - - - - Mr. G. D. Kelly.

Manchester and Salford Trades Council.
Secretary - - - - - - - - - Mr. G. D. Kelly.

Edinburgh and District United Trades Council.
President - - - - - - - - - Mr. J. Mallinson.

Dockers' Union.
President - - - - - - - - - Mr. T. Mann.

London Carmen's Trade Union.
General Secretary - - - - - - - Mr. F. W. Marsh.

United Shop Assistants' Union.
Secretary - - - - - - - - - Mr. A. Mussett.

Amalgamated Society of Railway Servants for Scotland.
General Secretary - - - - - - - Mr. H. Tait.

General Railway Workers' Union.
Secretary - - - - - - - - - Mr. C. Watson.

## APPENDIX, No. 6.

PAPER handed in by Mr. *H. J. Chaney*, 5 March 1895.

RETURN of WEIGHTS and MEASURES rejected or readjusted by Local Inspectors of Weights and Measures in *Great Britain* and *Ireland* during 1893–94.

| | Rejected. | Readjusted. |
|---|---|---|
| Weights: | | |
| Rejected | 217,136 | — |
| Readjusted | | 955,191 |
| Measures: | | |
| Rejected | 629,321 | — |
| Readjusted | | 60,328 |
| TOTAL Number of Weights and Measures rejected | 846,457 | — |
| TOTAL Number of Weights and Measures readjusted | | 1,015,519 |

## APPENDIX, No. 7.

PAPER handed in by Mr. *H. J. Chaney*, 19 March 1895.

TRANSLATION of the Austrian Weights and Measures Law of 23rd July 1871, for the introduction of the Metric System into the Austrian Empire; and, in pursuance of Art. X. thereof, the Official Notification of 17th of February 1872 for appointing the Austrian Standards Commission.

Extracted from the 6th Annual Report of the Standards Department, for the Year 1872.

AUSTRIAN LAW of 23rd July 1871, for establishing new Regulations for Weights and Measures.

WITH the concurrence of the two houses of the Imperial Legislature, I have to ordain as follows :—

Art. I. The fundamental base of legal weight and measure is the meter.

The meter is the unit of measure of length; from it are derived the units of superficial measure and of cubic measure (*Körpermass*).

The kilogramm, equal to the weight of a cubic decimeter of distilled water at the temperature of 4° of the Centigrade thermometer, constitutes the unit of weight.

The parts of the units of weight and measure, as well as the multiples, are to be constituted on the decimal scale.

Art. II. The primary measure of length is that glass bar which is in possession of the Imperial Government, and in the axis of its spherical ends, at the temperature of melting ice, has been found to be equal to 999·99764 millimeters of the metre prototype deposited in the French State archives at Paris.

The primary weight is that kilogramm of rock crystal in possession of the Imperial Government, which has been found to be equal in a vacuum to 999997·8 milligramms of the kilogramme prototype deposited in the French State archives at Paris.

Art. III. The legal weights and measures are—

A. Measures of Length :

| | | |
|---|---|---|
| Unit | | The meter. |
| Parts—The Decimeter | | $\frac{1}{10}$ meter. |
| Centimeter | | $\frac{1}{100}$ ,, |
| Millimeter | | $\frac{1}{1000}$ ,, |
| Multiples—Kilometer | | 1,000 ,, |
| Myriameter | | 10,000 ,, |

B. Superficial Measures :

*a.* In general : The squares of measures of length.

*b.* Special : Superficial land measures.

| | | |
|---|---|---|
| Unit : The ar | = | 100 square meters. |
| Multiple : The hektar | = | 100 ar. |

C. Cubic Measures :

*a.* In general : The cubes of measures of length.

*b.* Special : Measures of capacity.

| | | | |
|---|---|---|---|
| Unit : The Litre | = | 1 | cubic decimeter. |
| Parts : Deciliter | = | $\frac{1}{10}$ | litre. |
| Centiliter | = | $\frac{1}{100}$ | ,, |
| Multiple : Hektoliter | = | 100 | ,, |

D. Weights :

| | | | |
|---|---|---|---|
| Unit | | | The kilogramm. |
| Parts : The Dekagramm | = | $\frac{1}{100}$ | kilogramm. |
| Gramm | = | $\frac{1}{1000}$ | ,, |
| Decigramm | = | $\frac{1}{10000}$ | ,, |
| Centigramm | = | $\frac{1}{100000}$ | ,, |
| Milligramm | = | $\frac{1}{1000000}$ | ,, |
| Multiple : Ton | = | 1,000 | ,, |

Art. IV. The equivalents of the new and old weights and measures are determined for trade purposes as follows :—

Measures of Length :

| | | |
|---|---|---|
| 1 meter | = | 0·5272916 Vienna klafter. |
| 1 „ | = | 3 feet, 1 zoll, 11·580 lines. |
| 1 „ | = | 1·286077 ell. |
| 1 kilometer | = | 0·131823 Austrian mile (post mile). |
| 1 myriameter | = | 1·318229 „ „ „ |
| 1 centimeter | = | 0·094912 hand breadth (*Faust*). |
| 1 Vienna klafter | = | 1·896484 meter. |
| 1 foot | = | 0·316081 „ |
| 1 ell | = | 0·777558 „ |
| 1 Austrian (post) mile | = | 7·585936 kilometer. |
| 1 „ „ „ | = | 0·7585936 „ |
| 1 hand breadth (*Faust*) | = | 10·53602 centimeter. |

Superficial Measures :

| | | |
|---|---|---|
| 1 □ meter | = | 0·278036 □ klafter. |
| 1 „ | = | 10·00931 □ feet. |
| 1 ar | = | 27·80364 □ klafter. |
| 1 hektar | = | 1·737727 Austrian joch. |
| 1 □ myriameter | = | 1·737727 Austrian □ miles. |
| 1 □ klafter | = | 3·596652 □ meter. |
| 1 □ foot | = | 0·099907 „ |
| 1 Austrian joch | = | 57·54642 ar. |
| 1 „ „ | = | 0·5754642 hektar. |
| 1 Austrian mile | = | 0·5754642 □ myriameter. |

Cubic Measures :

| | | |
|---|---|---|
| 1 cubic meter | = | 0·146606 cubic klafter. |
| 1 „ „ | = | 31·66695 cubic feet. |
| 1 cubic klafter | = | 6·820992 cubic meters. |
| 1 cubic foot | = | 0·03157867 „ „ |

Dry Measures of Capacity :

| | | |
|---|---|---|
| 1 hektoliter | = | 1·626365 Vienna metzen. |
| 1 liter | = | 0·01626365 „ „ |
| 1 Vienna metzen | = | 0·6148682 hektoliter. |
| 1 „ „ | = | 61·48682 liter. |

Liquid Measures of Capacity :

| | | |
|---|---|---|
| 1 hektoliter | = | 1·767129 Vienna eimer. |
| 1 liter | = | 0·7068515 Vienna mass. |
| 1 Vienna eimer | = | 0·565890 hektoliter. |
| 1 „ mass | = | 1·414724 liter. |

Weights :

| | | |
|---|---|---|
| 1 kilogramm | = | 1·785523 Vienna pound, or 1 pound 25·137 loth. |
| 1 dekagramm | = | 0·571367 „ loth. |
| 1 ton | = | 1785·523 „ pounds. |
| 1 kilogramm | = | 2 Zoll-pounds. |
| 1 „ | = | 2·380697 apothecaries-pounds. |
| 1 „ | = | 3·562928 Vienna marks (silver weight). |
| 1 gramm | = | 0·286459 ducat (gold weight). |
| 1 „ | = | 4·855099 Vienna karats. |
| 1 „ | = | 0·06 post-loth. |
| 1 Vienna pound | = | 0·560060 kilogramm. |
| 1 „ centner | = | 56·006 „ |
| 1 „ loth | = | 1·750187 dekagramm. |
| 1 zoll-centner | = | 50 kilogramm. |
| 1 zoll-pound | = | 0·5 dekagramm. |
| 1 apothecaries-pound | = | 0·420045 dekagramm. |
| 1 Vienna mark (silver weight) | = | 0·280668 „ |
| 1 ducat (gold weight) | = | 3·490896 gramm. |
| 1 Vienna karat | = | 0·205969 „ |
| 1 post-loth | = | 16·666667 „ |

Art. V. The weights and measures specified in Art. III. are to be used in open trade exclusively from 1st January 1876.

After this date weights and measures, hitherto legal, for which the weights and measures specified above are to be substituted, as well as karat and oil weights and measures, are forbidden to be used in open trade.

So far, however, as concerns the use of the new measures for the measurement of land, the Government, in case of need, is empowered to prolong the term of the introduction of the new measures.

Art. VI. The use in open trade of illegal weights, measures, and weighing or measuring instruments (Art V., XVII., XVIII.), is punishable with a fine of from five to 100 florins, exclusive of all liability under the Penal Code, as well as forfeiture of such weights, measures, &c. A repetition of the offence is to be considered as an aggravating circumstance in determining the amount of punishment. All money fines are to go to the common poor box of the place in which the offence is committed.

In case of non-payment of the money fine, imprisonment is to be substituted at the rate of one day for every five gulden.

Art. VII. In settling contracts entered into before the period specified in Art. V., when at the time of settlement the old weights and measures have become illegal, the equivalent new weights and measures are to be taken according to Art IV.

Art. VIII. The use of the new weights and measures is allowed in open trade from 1st January 1873, if the parties concur.

For this purpose, traders who carry on their buying and selling in an open place of business, and wish to use the new weights and measures, must publicly notify the same by a placard in such place of business, and place beside it a table of equivalents of the old and the new weights and measures.

Art. IX.

Art. IX. Secondary standard weights and measures are to be constructed and accurately adjusted from verified copies of the primary meter and kilogramm.

Art. X. In order to superintend the construction and verification of copies of the primary standards, and the secondary standard weights and measures to be used by the verifying officers, as well as generally to direct the technical work in pursuance of this law, and to secure from time to time due compliance with the regulations for carrying out the system of weights and measures, an Imperial Standards Commission, holding their sittings at Vienna, is to be appointed as the organ of administration, who will enter upon their functions immediately upon the publication of this weights and measures law.

Art. XI. No other weights, measures, and balances are to be used for weighing and measuring in open trade than such as are duly verified and stamped.

The verification and stamping of weights, measures, and apparatus (or sealing) is to be effected by verifying officers appointed for this purpose as public functionaries, who are to be provided with the requisite working standards.

A fee is to be charged for verifying and stamping, to be fixed by the administration with reference to local circumstances.

Art. XII. All wine, beer, and spirits in casks or vessels intended for sale, must be delivered to the buyer in such casks or vessels upon which the contents in whole numbers of liters shall have been officially certified by stamping according to the regulations.

The only exception is in the case of foreign wines, beer, and spirits which are re-sold in the original casks or vessels.

Art. XIII. The following weights and measures only are admissible for verification and stamping :—

| | |
|---|---|
| Measures of length - - - - - - - - | 20, 10, 5, 4, 2, 1 meter. |
| | 5, 2 decimeter. |
| Measures of capacity - - - - - - | 100, 50, 20, 10, 5, 2, 1 liter. |
| | 5, 2, 1 deciliter. |
| | 5, 2, 1 centiliter. |

The quarter hektoliter, as well as binary parts of the liter are also admissible for verification and stamping :—

| | |
|---|---|
| Weights - - - - - - - - - - - | 20, 10, 5, 2, 1 kilogramm. |
| | 50, 20, 10, 5, 2, 1 dekagramm. |
| | 5, 2, 1 gramm. |

Additional weights to be used for gold and silver wares, and for medicinal purposes, are :—

50, 20, 10, 5, 2, 1 centigramm,

and for coin and jewel weights—

5, 2, 1 milligramm.

For decimal balances the smallest weight is 1 gramm, and for centesimal balances 1 dekagramm.

For determining the weight of corn, testing weights are to be used of—

100, 40, 20, 10, 4, 2, 1, 0·4, and 0·2 gramm,

representing 500 times their weight, viz., 50, 20, 10, 5, 2, 1, 0·5, 0·2, and 0·1 kilogramm. For testing purposes, a measure of capacity (*probehektoliter*) may be used containing the 500th part of a hektoliter.

Art. XIV. The limits of error to be allowed in verifying and stamping weights and measures will be fixed by official regulations.

Art. XV. All weights and measures used in open trade for buying and selling are to be subjected by their owners to periodical reverification at such time as shall be fixed by a special regulation.

The use of weights and measures in open trade with errors greater than allowed by law (Art. XIV.) will be punishable according to the provisions of Art. VI.

Art. XVI. The several descriptions of weights specified in Art. XIII. are to be easily distinguishable by their form.

Art. XVII. The dynamic unit of weight used in mechanical works, known as horse-power, is fixed at 75 kilogramm-meter, that is to say, to raise 75 kilogramms a meter high in a second.

This determination is meant to serve for indicating the power of work of a stationary engine or locomotive, and is not to be taken as decisive of disputed cases.

Art. XVIII. Only such alcoholmeters, saccharometers, and gas meters as are duly stamped are allowed to be used in open trade.

Art. XIX. The use of the nautical mile, equal to the 60th part of a degree of the equator, as well as the ship-ton for trade purposes in navigation, legalised by the law of 15th May 1871 (Imperial Statute Book, No. 43), is not affected by this law.

Art. XX. The meeting and extent of duties of the Imperial Standards Commission, the instructions for the verifying officers, the process of verifying and stamping weights and measures, together with their form, construction, and marks, are to be regulated by special notifications by the executive authorities.

Art. XXI. The Minister of Commerce is charged with the execution of this law.

(signed) *Franz Joseph.*
*Hohenwart.*
*Schäffle.*

Vienna, 23rd July 1871.

---

OFFICIAL NOTIFICATION of the Minister of Commerce, dated 17th February 1872, for appointing the Austrian Standards Commission, in pursuance of Article X. of the Weights and Measures Law of 23rd July 1872.

§ 1. The Standards Commission is the highest administrative authority for weights and measures, and is to hold its meetings at Vienna, and bear the title of Imperial Standards Commission ("*K. K. Normal-Aichungs-Commission*").

§ 2. The Standards Commission is empowered to regulate all the technical details of verification, and to watch that the work of verification is generally carried out according to uniform regulations.

The Standards Commission is also specially charged with :—

1. The issue of regulations in regard to the material, form, marks, and peculiar construction of weights and measures, together with the limits of error to be observed on the part of verifying officers; to determine

determine what kinds of balances are to be legal in open trade or for special objects, and to fix the conditions on which they are admissible for stamping ; and further to prescribe whatever may be requisite for the construction of measuring apparatus otherwise provided for in the Weights and Measures Law, and of stamps, as well as to decide upon the admissibility of other instruments for verification and stamping.

2. The construction and verification of copies of the primary standards, secondary standard weights and measures, and working standards for verifiers, and providing the verifying officers with standards and the necessary standard apparatus.

3. The regulation of the course of proceeding to be adopted in verifying and stamping, the drawing up the tariffs of fees to be levied by verifying officers, and finally, the exercise of control over the technical duties of the supervising authorities.

§ 3. The Standards Commission is to consist of :

1. The Director.

2. The other members, who are to be co-ordinate with the Director under the circumstances stated in this notification, and in general council under its presidency.

The meeting of the Commission is to be officially published.

§ 4. The director, to whom the title and character of a privy councillor (*Ministerialrath*) is assigned, is to be nominated by His Majesty the Emperor, on the proposition of the Minister of Commerce.

The co-ordinate members, whose number will be fixed according to need, will be nominated on the proposition of the Minister of Commerce for a period of every five years. They will receive no salary for their labours, but when not resident in Vienna, and called on service, will have an allowance for diet and costs of travelling under Class VI. of the Allowance for Diet, unless legally entitled to higher rate of pay.

§ 5. All regulations of a general character, whether conclusive or preparatory, are to be passed by resolution at the full meeting of the Standards Commission, especially the determination of the scientific principles to be laid down for the construction of weights and measures ; the preparation of regulations for verification ; proposing the rates of fees to be fixed, as well as any additional or supplementary fees : drawing up instructions for the verifying officers ; and proposing for approval police regulations to be issued with reference to weights and measures.

§ 6. The full meeting of the Commission is to be called by the director, according as circumstances may arise requiring their deliberation, but not less than once in every year. Besides this, in urgent cases, or on occasions of minor importance, the members may be consulted and agree to resolutions by written communications, provided that at least two members of the Commission attend in person for deliberation.

For passing a valid resolution at a full meeting, the majority of voices of those present is requisite, to be taken at the time fixed by the director, by votes in a written form folded up. If the votes then given in writing are divided, so that an absolute majority is not obtained, even after taking the votes in writing a second time, a further decision is to be arrived at by taking the verbal votes of members present at a full meeting.

In case of equality of voices the director has the casting vote.

If the director is unable to attend, the eldest associated member is to preside in his stead.

§ 7. The preparation of the proceedings for the deliberation of the full meeting, and the taking of the steps necessary for carrying out their resolutions, as well the execution of all business of the Standards Commission other than is mentioned in § 5, is left to the responsibility of the director, who will sign all the documents of the Commission.

The director is empowered, upon his own responsibility, to entrust the charge of any particular business, or whole branch of business, to the members resident in Vienna, who will receive corresponding remuneration for their labours.

In case of the director being unable for any length of time to perform his duties, the Minister of Commerce, upon his recommendation, is to appoint one of his colleagues resident in Vienna to act in his stead.

§ 8. The requisite personal staff for transacting the buisness of the Standards Commission will be subordinate to the director. It will consist partly of permanent officers and partly of persons temporarily employed, and these last will be engaged for such service by the director, and be discharged by him, as may be found necessary.

§ 9. The permanent staff will be an official secretary (*Ministerialsecretär*) and clerk (*Ministerialconcipist*), two technical officers entitled supervisor (*Oberinspector*), an inspector, an accountant, and a Chancery officer.

The permanent officers, with the exception of the two technical officers, will be taken from the establishment of the Minister of Commerce, and will be transferred to the Standards Commission. The two technical officers will be nominated by the Minister of Commerce.

§ 10. Every year, at a period to be prescribed to him by the Minister of Commerce, the director will draw up an estimate of anticipated receipt and expenditure for the coming year, and present it to the Minister of Commerce for approval and insertion in the budget. In like manner he is to transmit his yearly account to the Minister of Commerce at latest before the end of February in every year, and to append a summary of the stock of materials, and the receipt and issue of materials, together with any observations he may have to make upon the subject.

§ 11. The director is to have the entire disposal of the accounts of monthly credits opened from time to time on the basis of the estimates granted. The Government pay office, when supplied with the monthly allowance, is to make the payments upon the written authority of the director, to take charge of the receipts, and account for both.

§ 12. The Standards Commission is to be in direct communication with the technical officers of supervision, and is authorised to give them the necessary directions in connection with the objects of their sphere of action.

§ 13. The Standards Commission is every year to make to the Minister of Commerce a general report of the progress of the work of verification, based upon the summaries of business transmitted by the supervising officers, as well as of the transactions of the Commission.

(signed) *Banhaus.*

## APPENDIX, No. 8.

**PAPER** handed in by Mr. *Charles Umney*, 30 April 1895.

*Use of Metric Weights and Measures for Export.*

London, E.C., 4, Jewry-street,
4 March 1895.

Dear Sir,

In reference to the above subject, we thank you for advising us what you have been doing in the matter, and we can assure you that it would be most inconvenient and prejudicial to our business if we stopped using the metric weights and measures, which are now being used by us constantly for our South American business, as you will easily see it would be giving the foreigners a considerable advantage ; and, in fact, we cannot speak too strongly of the necessity of getting a fresh Act passed to meet the requirements of the case.

Thanking you very much for the trouble you are taking,

We are, &c.
(signed) *Baiss Brothers & Co.*

Charles Umney, Esq.,
48 & 50, Southwark-street, S.E.

---

12 & 16, Coleman-street, London, E.C.,
2 March 1895.

Dear Sir,

We beg to acknowledge receipt of your favour of the 27th ultimo, having reference to the use of metric weights and measures for export.

As a very large proportion of our export orders for drugs and chemicals are required to be supplied in kilos, and fractions thereof, the prohibition of the use of these weights will, in our opinion, seriously interfere with our export trade, and that of other firms ; and, in the face of increasing foreign competition, it is desirable that every facility should be given to the British trader to meet the wishes of his foreign customer, in filling his indent according to the weights he desires.

Trusting that the authorities will see their way to a revision of the present regulations,

We remain, &c.
(signed) per pro *Burgoyne, Burbidges & Co.*,
*Hamord.*

C. Umney, Esq.,
48, Southwark-street, S.E.

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*Metric Weights and Measures.*

30 & 32, St. Mary Axe, London,
25 February 1895.

Dear Sir,

We have your favour of this date, and in reply we beg to inform you that we constantly receive indents for drugs and chemicals to be supplied in units of one kilo and half kilo, and that it is absolutely necessary for the conduct of our business that we should supply these goods in the weights ordered. It having been decided that the use of these weights is illegal, we trust that measures will be taken to induce the authorities to allow the use of the metrical weights and measures, as the prohibition to use such will cause great inconvenience to our own and similar export trades.

We are, &c.
(signed) *George Curling & Co.*

Chas. Umney, Esq.,
50, Southwark-street, S.E.

---

60, Bartholomew Close, London, E.C.,
4 March 1895.

Dear Sir,

In reply to your letter of the 27th ult., we are very glad to hear that a Select Committee of the House of Commons is to consider the present Weights and Measures Act, which is in urgent need of amendment.

We do a large export business in drugs with the Continent of Europe, especially with France, and it is a daily occurrence for us to have goods ordered by the kilogramme and by the litre.

That we are not legally permitted to use kilometre weights and litre measures in the execution of such orders is a restriction to trade which should be removed at once.

Yours, &c.
(signed) *Evans, Lescher & Webb.*

Chas. Umney, Esq.,
48, Southwark-street, S.E.

---

56, Hanover-street, Liverpool,
28 February 1895.

Dear Sir,

METRIC Weights and Measures.—We have to acknowledge receipt of your favour of the 27th inst., and in reply, beg to state that we receive numerous indents for drugs, chemicals, &c., to be supplied in units of one kilo and half kilo, and that it is absolutely necessary for the proper conduct of our business that we supply the goods in the weights ordered. It having been decided that the use of these weights is illegal, we trust that you will be successful in your efforts to induce the authorities to allow the use of the metrical weights and measures for the purpose of export trade; otherwise, we need hardly say, it will cause great inconvenience to our and similar trades, and must have the effect of diverting a good deal of trade into competing countries where such regulations are not in force.

Yours, &c.
(signed) *Evans, Louis & Co.*

Charles Umney, Esq.,
Southwark-street, London.

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58 & 58, Bunhill-row, London, E.C.,
25 February 1895.

Dear Sir,

REPLYING to your letter of even date, we beg to say that our foreign indents are almost invariably for kilos or parts of kilos, and that it is imperative that we fill them as ordered.

Yours, &c.
(signed) per pro *Hyman & Westwood,*
*H. J. Waddington.*

Charles Umney, Esq.

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Mitre-square, Aldgate, London, E.C.,
7 March 1895.

Dear Sir,

WE beg to inform you that all our customers in South America demand metric weights and measures, and it would inevitably mean the loss of our trade did we not do so.

The custom regulations in several South American countries demand metric weights for the entry of the goods, which is an additional reason for the use of these weights, and our opponents abroad would immediately obtain the benefit of this trade should we be compelled to use other weights than metric.

Yours, &c.
(signed) *Horner & Sons.*

C. Umney, Esq.

## APPENDIX, No. 9.

### PAPER handed in by Mr. *H. J. Chaney*, April 1895.

(No. 13—Commercial.)

My Lord, Rome, 18 March 1895.

With reference to your Lordship's Despatch of this Series, No. 13, of the 13th instant, I have the honour to report that I am informed that the metric system was introduced into Italy by Decree of the Provisional French Governments that were established in the different States of Italy during the last years of the last century and the first years of the present.

2. There was no fixed period allowed by law for passing from the old systems to the new, but the use of the metric system was never rigorously enforced, and it was only compulsory in Government transactions.

3. Hence, although every vendor is now required to be possessed of metric weights and measures, yet the people both in the towns and in the country still make use of the numerous old weights and measures, especially the "libbra," in transactions between each other.

I have, &c.
(signed) *Francis Clare Ford.*

The Earl of Kimberley, K.G.,
&c. &c. &c.

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(No. 17—Commercial.)

My Lord, British Embassy, Rome, 10 April 1895.

I have the honour, with reference to your Lordship's Despatch, No. 15. of this Series, of the 1st instant, to enclose herein a précis of the law of July 28 1861, introducing the metric system of weights and measures into Italy, as well as of a Royal Decree of the same date containing regulations for carrying out the above-mentioned law.

A Royal Decree of the 25th of October 1871 extends to the newly-annexed Papal States the provisions of the Law of July 28 1861.

I have, &c.
(signed) *Francis Clare Ford.*

The Earl of Kimberley, K.G.,
&c. &c. &c.

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(Copy.)

Précis of the Law of 28 July 1861, introducing the Metric System into the Kingdom of Italy.

Article 1. Declares that in the Kingdom of Italy the only legal weights and measures shall be the Metric ones (decimal system).

Articles 2, 3, and 4 enumerate the names and values of the new weights and measures.

Article 5 declares that the standard metre and kilogramme for the Kingdom shall be made of platinum, and shall be kept in the Building of the General Archives of the Kingdom.

Article 6 relates to the appointment of officials for inspecting and verifying weights and measures.

Article 7 declares that duplicates of the standard metre and kilogramme shall be kept in certain Provincial cities for the purpose of facilitating the verification of weights and measures.

Article 8. The metric system is to be used in all Official Documents, Proclamations, Notices, &c.

Article 9. In all Deeds and Documents relating to land in which reference is made to old surveys, the areas according to the system in force at the time the survey was made shall be inserted, as well as the equivalent in the new metric system.

Article 10. All weights and measures mentioned in contracts must be in accordance with the metric system.

Article 11. In Public Markets and other suitable places comparative tables shall be placed showing the relation between the old measures and those in present use.

Articles 12 to 19 deal with the details for the verification and inspection of weights and measures; fees for doing so, &c.

Articles 20 to 27 deal with the fines and penalties for infractions of this Law.

Article 28. A Royal Decree, which must not be published later than the 1st of January 1863, will fix the date for the coming into force of this Law in the Neapolitan Provinces and Sicily.

Article 29. In Provinces not yet organised under the new régime, the duties to be performed by the Provincial and Communal Authorities mentioned in this Law shall be performed by the corresponding officials appointed under the old régime.

Article 30. All laws contrary in spirit to the present one are repealed.

Dated Turin, 28th July 1861.

Appended is a Table giving a full description of all the new legal weights and measures.

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On the 28th July 1861 a Royal Decree was issued containing detailed regulations for carrying out the above law of the same date. The Royal Decree is divided into sections as follows :—

Section I. Regulations for the creation of a consultative commission as well as of a Board of Weights and Measures ; details of the methods to be employed in testing weights and measures ; regulations for the selection and appointment of inspectors ; instructions for making the public familiar with the new scheme by publication of notices, comparative tables, &c.

Section II.—(*a*) Regulations for maintaining the constant uniformity of weights and measures.

(*b*) Regulations for the examination of candidates who wish to become inspectors of weights and measures.

(*c*) Regulations for the guidance of the officials of the Department of Weights and Measures, explaining to them their duties.

Section III.—(*a*) Regulations with regard to the buildings and offices to be used ; they should be easily accessible to the public and persons who wish to have their weights tested.

(*b*) Regulations with regard to the instruments to be used in testing weights and measures, and the proper care to be taken of them.

Section IV. Regulations with regard to the persons engaged in trades (shopkeepers), who must possess and use the new legal weights and measures, and of the obligation incumbent upon them to have them periodically tested.

Section V. Regulations for the keeping and preservation of the standard weight and measure and duplicates of it.

Section VI. Regulations explaining the rights of inspectors of weights and measures.

Section VII. Regulations for the "surveillance" of the sale of merchandise sold by weight or measure.

Section VIII. Regulations regarding the confiscation of false weights and measures, and of merchandise sold under weight.

Appended to this Royal Decree is a Table showing the number of inspectors and other officials required for carrying out the new law with regard to weights and measures, and the amount of their salaries.

## APPENDIX, No. 10.

PAPER handed in by Mr. *E. Johnson*, 14 May 1895.

LIST of RESOLUTIONS, passed by Public Bodies in favour of the adoption of the Metric System of Weights and Measures in this Country, passed in the present Year.

TOWN COUNCILS.

| Date. | TOWN. | RESOLUTION. |
|---|---|---|
| 1895: | | |
| 26 February - | Borough and County Borough of Leicester. | That this Council heartily approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. Carried unanimously. |
| 10 April - | Nottingham - - - | Resolved,—That this Committee approve of the proposal to adopt the Metric System of Weights and Measures in this country, and are glad to hear that a Select Committee of the House will shortly inquire into the matter. |
| 3 April - | Bournemouth - - - | That the Council heartily approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 3 April - | Worcester - - - - | That this Council hereby expresses its approval of the proposal to adopt the Metric System of Weights and Measures in this country. |
| 1 April - | Barrow-in-Furness - - | Resolved,—That this Council heartily approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 3 April - | Blackpool - - - - | Resolved,—That the Corporation approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 5 April - | Lydd - - - - - | The Metric System.—It was resolved that this Council heartily approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 3 April - | Bangor - - - - | That this Council heartily approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 3 April - | Bradford - - - - | Metric System of Weights and Measures.—This matter was discussed, but although the Committee view with satisfaction the steps which have been taken by Parliament in appointing a Select Committee of the House, to whom the consideration of the Metric System has been referred for inquiry, they do not think it desirable to make any recommendation in the matter, more especially as various Chambers of Commerce are devoting their attention to the question. |

| Date. | Town. | Resolution. |
|---|---|---|
| 1895 : | | |
| 9 April - | Longton (Staffordshire) - | Resolution passed similar to Leicester. |
| 8 April - | Scarborough - - - | Resolved,—That this Council approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 3 April - | West Bromwich - - - | Resolution passed in favour of the adoption of the Metric System of Weights and Measures in this country. |
| 17 April - | Bacup - - - - - | Resolution passed similar to Leicester. |
| 26 April - | Accrington - - - - | Resolution passed similar to Leicester. |
| 4 April - | Halifax - - - - | Resolution passed similar to Leicester. |
| 8 April - | Heywood - - - - | Resolution passed similar to Leicester. |
| 30 March - | Warrington - - - | Resolution passed in favour of the adoption of the Metric System of Weights and Measures in this country. |
| 2 April - | Bishop's Castle - - | Resolution passed similar to Leicester. |
| 27 April - | Chorley - - - | Resolution passed in favour of the Metric System of Weights and Measures in this country. |
| 27 March - | Lincoln - - - - | Resolution passed similar to Leicester. |
| 30 April - | Sheffield - - - - | Resolved, That this Committee heartily approve of the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter.<br><br>[Confirmed by the full Council, 8th May.] |

Supplementary List of Resolutions passed by Town Councils, &c., in favour of Metric Weights and Measures.

| Date. | Town. | Resolution. |
|---|---|---|
| 1895 : | | |
| 13 May - - | Plymouth Town Council - | That this Council heartily approve the proposal to adopt the Metric System of Weights and Measures in this country, and learn with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 10 May - - | Chipping Norton Town Council. | - - - Idem. |
| 30 May - - | Middleton Town Council - | That this Council approves of the proposal to adopt the Metric System of Weights and Measures in this country, and that a copy of this resolution be sent to the Chairman of the Select Committee on Weights and Measures, House of Commons. |

| Date. | Town. | Resolution. |
|---|---|---|
| 1895: | | |
| 9 May - - | Crewe Town Council (Geneneral Purposes Committee). | That this Committee heartily approves the proposal to adopt the Metric System of Weights and Measures in this country, and learns with satisfaction that the Government has sanctioned the appointment of a Select Committee to inquire into the matter. |
| 1 May - - | Congleton Town Council - | - - - Idem. |
| 14 June - - | Newport, Mon., Town Council. | - - - Idem. |
| 26 June - - | Brighouse Town Council - | - - - Idem. |
| 20 May - - | Wigan School Board - - | That in the interests of Elementary Education, the Board consider that the adoption of the Metric System of Weights and Measures would be advantageous. |
| 21 May - - | Hindley (near Wigan) School Attendance Committee. | Resolved,—That the Hindley School Attendance Committee are in favour of the adoption of the Decimal System of Weights, Measures, and Coinage. |
| 10 June - - | Loughborough Town Council Finance Committee. | That in the opinion of this Council a Decimal System of Weights and Measures is demanded in the interest of Commerce and Public Convenience, and that the time has arrived when such system should be adopted in England. |
| 30 May - - | West Hartlepool School Board. | Resolved unanimously,—That this Board is of opinion that it would be to the educational advantage of this country (by simplifying the arithmetic taught in elementary schools and lessening the time now spent thereon) that the Metric System of Weights and Measures should at an early date become the universal and legal method of the United Kingdom.<br>This Board, therefore, expresses the hope that the Select Committee of the House of Commons on Weights and Measures may recommend Parliament to pass an Act providing for the adoption of the Metric system. |

# I N D E X.

[*N.B.*—In this Index the Figures following the Names of the Witnesses, and those in the Analysis of Evidence of each Witness, refer to the Questions in the Evidence; the Figures following *App.* refer to the Pages in the Appendix; and the Numerals following *Rep.* to the Pages in the Report and Proceedings of the Committee.]


A.

*ACTS OF PARLIAMENT.* Enumeration of the various Acts of Parliament relating to weights and measures, *Chaney* 48–51; *App.* 177——Obligation under the Act of 1878 as to the use of the Imperial weight and measure or some multiple thereof, *Kyle* 2904.

*Alteration and Conversion of Weights.* Suggestions as to the way in which some of the Imperial weights could be converted into metric weights if the metric system were adopted in England, *Siemens* 528–534——Opinion that it would cost more to convert the present weights into metric weights than to provide new ones; desirability of altering the larger weights, if possible, *Street* 872–886.

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*Austria.* Copy of book handed in by witness in connection with the introduction of the metric system into Austria, where the new system was permissive from 1st January 1873 to the 1st January 1876, and compulsory after that date; there was no objection whatever to this change, *Siemens* 551–559. 581–589.

Extract from the sixth annual report of the Standards Department for the year 1872, showing the provisions of the Austrian Law of 23rd July 1871 for establishing the new regulations for weights and measures in accordance with the metric system, *App.* 193–196.

*Avoirdupois Weight.* Gradual substitution of avoirdupois weight for troy weight in the years 1842 to 1855; the change was comparatively easy, *Chaney* 126–132. 208—— Belief that the pound avoirdupois dates back to the Saxon period, and that the avoirdupois weight existed in this country before the troy weight; no record of the ounce before the thirteenth century, *ib.* 130–238. 260–263——Attention drawn to the anomalies that exist in regard to the avoirdupois and troy weights; impression that there are a good many other eccentricities, *Dawson* 360, 361. 461–464. 478, 479.

Recommendation by inspectors under the London County Council that the troy and apothecaries' weights should be abolished and the avoirdupois weight substituted; non-objection to the metric weights being substituted instead of the avoirdupois, *Spencer* 759–761. 780, 781. 844.

B.

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*Baker, Sir Benjamin, F.R.S.* (Analysis of his Evidence)—*continued.*

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*Belgium.* Entire disuse of the old weights and measures in Belgium, *Johnson* 2167.

*Board of Trade.* Difficulties arising in the Statistical Department owing to the necessity of calculating foreign weights that are shipped to this country in the metrical system, *Giffen* 2212–2215.

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*Boll.* Absence of any evidence that the boll is in use in the potato trade in Scotland at the present time, *Chaney* 282–286.

*Bordeaux.* Reference to a report by the English Consul at Bordeaux, in which strong preference is expressed for the metric system in England in lieu of the present system, *Johnson* 2150–2153.

*Bramwell, Sir Frederick Joseph, Bart., F.R.S.* (Analysis of his Evidence.)—Witness has particularly considered the question of the relative merits of the metric and English Imperial systems of weights and measures, and has had opportunities in Egypt of seeing the former in practice; was a member of the Committee of the British Association for the preservation of the English system, 2436–2440.

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*British Empire.* Return handed in showing the weight and measure system of the various countries of the world, and particularly of the British Empire, throughout which the imperial system is almost universal, *Chaney* 161–163. 220; *App.* 179.

## C.

*Calculations.* Submission by witness of tables showing that calculations can be made with greater ease and less risk of error with the metric system than with the weights and measures of the existing system; opinion that the adoption of the former would tend to make the exercises in schools have reference to subjects of daily occurrence in after life, *Dowson* 339–350.

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*Chambers of Commerce.* Unanimous resolution of the Associated Chambers of Commerce in favour of the adoption of metric weights and measures, *Rowlett* 2045. 2047, 2048.

*Chaney, H. J.* (Analysis of his Evidence.)—Witness is Superintendent of Weights and Measures at the Board of Trade, 1.

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*Chaney, H. J.* (Analysis of his Evidence)—*continued.*

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*Customs Department.* Impression that the English Customs will not pass a package outwards unless the weight is given in pounds, *Carteigh* 2404–2409.

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## D.

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*Denmark.* Information respecting the system of weights and measures in use in Denmark, the pound, which is exactly half a kilo, being divided into hundreds, and the foot into 12 parts; limited use of English weights and measures there, principally by engineers, *Prytz* 1366–1377. 1405–1436——Statement that the weights and measures are stamped, but that no inspectors are appointed, *ib.* 1378.

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*Glasgow* (*Trades Congress*). Evidence to the effect that it was unanimously resolved, at the Trades Congress at Glasgow, in 1892, that it is highly desirable, in the interests of the working classes, and of the general trade of the country, that the metric system of weights and measures and coinage should be adopted, *Uttley* 2696–2704.

*Gloves and Ribbons.* Evidence to the effect that the sizes of gloves and the widths of ribbons would not be practically affected by the adoption of the metric system, *Debenham* 1186–1200.

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Inquiries made three or four years ago by an association of which witness was Chairman as to the desirability of an uniform weight for the sale of corn, &c., throughout the whole country; numerous responses received, about 75 per cent. being in favour of the hundredweight and the ton as the standard, *Shuker* 1767–1779. 1793–1798. 1802. 1833, 1834——Objections received mainly from the eastern and western countries to the foregoing standard and in favour of the extension of the various local weights; anomalies and complication through the different weights and measures in Cornwall, Norfolk, and other counties, *ib.* 1772–1778. 1786–1792. 1806, 1807. 1835–1838.

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Submission by witness of papers containing calculations demonstrating the ease and accuracy with which various weights can be multiplied and divided under the present system, *Sir F. J. Bramwell* 2487, 2488. 2530–2538——Satisfaction generally of witness with the present system of Imperial weights and measures; non-objection to the pound troy so long as the weight of the grain remains unaltered, *ib.* 2494–2499. 2568——Opinion that there is more risk of inaccuracy in regard to the decimal points in ordinary transactions under the metric system than there is in working with the present system of weights and measures, *ib.* 2529–2543.

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*India.* Short history of the futile attempts made since 1833 to evolve order out of the complete state of chaos in which the weights and measures of India had remained from a very distant period; although witness' recommendation in 1867 to eventually adopt the metric system was passed into law, it has been a dead letter, *Strachey* 662–702. 723–725——Absence of any recognised or authorised legal weight or measure at the present time; illustration of the great variation in the weight of the ordinary seer, *ib.* 663–682.

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——Legality of the kilogramme in India, *Strachey* 708——Statement that the metre, which is not a legal measure, is as near an approximation to the yard as the average Indian guz, *ib.* 709.

Conclusion that the introduction of the metric system would be of great advantage to India; no doubt that the great difficulties in the way of the change could be overcome, especially if the new system be put in force on the railways, *Strachey* 712–734.

Certainty that if the metric system were introduced into India, without being adopted here, the home textile manufacturers would be handicapped to a very serious extent, *Wollmer* 1122–1124.

*Inspectors* (*Board of Trade*). Representation by witness, as Chairman of the Incorporated Society of Inspectors of Weights and Measures, which comprises over 300 members from all parts of the kingdom; he submits the views of the society in favour of the metric system, *Kyle* 2892 *et seq.*

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*Insurance Companies.* Practice of some insurance offices to make all their calculations by decimals of a pound, *Siemens* 568.

*International Arrangement.* Advocacy of the adoption by England of the metric decimal system in common with other nations; belief that the difficulties that would attend the change are much exaggerated, *Donson* 387–390. 430. 452–455. 465–477.

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*Italy.* Letters and Papers supplied by the British Embassy at Rome explanatory of the introduction of the metric system in Italy and of the regulations for its enforcement and working, *App.* 199, 200.

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*Japan.* Evidence to the effect that, although Japan has adopted the metric system, the English system of weights and measures is in use there for textile goods, *Wollmer* 1129–1132.

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*Kyle, Thomas.* (Analysis of his Evidence.)—Witness, who is County Inspector of Weights and Measures for Buckinghamshire, is Chairman of the Incorporated Society of Inspectors of Weights and Measures, which comprises over 300 members from all parts of the kingdom, 2892–2897.

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*Leicester.* Advocacy on the part of the cotton yarn trade of Leicester of the adoption of the metric system in lieu of the present anomalous and complicated system, *Rowlett* 1911 *et seq.*

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*Lenders, Francis Hubert.* (Analysis of his Evidence.)—Representation by witness of the firm of Lenders & Co. of Bishopsgate-street, importers and exporters of grain and oil seeds, and having houses also at Liverpool, Odessa, and Krehl, 1650–1652.

Practice of the firm to sell everything on the decimal system abroad in foreign weight and foreign money, and to buy in this country on the ordinary English basis of so many pounds weight in English money; facility by means of special tables calculating the different exchanges and comparisons, 1653–1657. 1719–1749. 1761–1763——Decided convenience in witness' trade if dealings took place in England under the metrical system as on the Continent; general approval thereof in the trade, 1658–1662——Distinct system in Russia, the price being made per pood of thirty-six pounds; doubt as to there being any desire in Russia for the decimal system of Germany or France, 1663–1667. 1694, 1695.

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*Local Authorities.* Ability of the local authorities to interfere with the use of illegal weights and measures if they deem it necessary, *Chaney* 264–269.——Resolutions in favour of the metric or decimal system passed by Trades Councils, Chambers of Commerce, some of the School Boards, the National Union of Teachers, the Incorporated Society of Inspectors of Weights and Measures, the Trades Union Congress, &c., *Dowson* 400–418; *App.* 191. 201–203.

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Information as to the numerous and anomalous customary measures now in force in different localities, these measures frequently giving an unfair advantage to vendors, *Kyle* 2923–2928——Obstacles to the abolition of customary or local measures through the action of the inspectors; expediency of their abolition under Act establishing the metric system, *ib.* 2924–2935.

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*London.* Evidence to the effect that the Weights and Measures Acts are carried out in London under witness' department of the County Council, independently of the Board of Trade; necessity, however, of the Council's inspectors having a Board of Trade certificate of competency, *Spencer* 737–744—— Information relative to the verification and stamping of the weights and measures used in trade, London, excepting the City, being divided into thirteen districts for the purpose, each with an inspector, the total staff consisting of seventy men, *ib.* 745 *et seq.*

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Statistics in connection with the stamping of weights and measures in London, showing that the total number submitted for verification and stamping last year was 1,300,000, of which 300,000 were rejected as unfit, *Spencer* 748-752——Satisfactory working of the present imperial system of weights and measures so far as the London retail trade is concerned; preference of witness for the metric system if change is to be made, *ib.* 759–761. 794–807. 836–843.

Resolution of the London County Council, at the instance of the London Chamber of Commerce, to support a Bill providing for the permissive use of the metric system for foreign trade; belief that no confusion would result from a national and an international system running together, *Spencer* 770–775. 793. 806–843.

Approval of the metric system by the large wholesale dealers, especially those who transact business with foreign merchants; experience of witness that the system is largely employed in the City, *Street* 848–856. 887, 888——Statement that the majority of bullion and diamond merchants, jewellers, and silversmiths are in favour of the adoption of the metric system; difficulty in regard to the use of the obsolete twelve grain weight, *ib.* 862–871. 918–931.

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*Manchester.* Belief that the objection to the metric system on the part of Manchester cotton spinners might soon be removed, *Rowlett* 1934. 1968, 1969.

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*Manufacturers.* See *Foreign Trade. Leicester. Sheffield. Yarns.*

*Mental Calculations.* Simplicity of the metric system as regards mental calculations, *Rowlett* 1976, 1977——Great saving as regards mental calculations under the metric system, *Pilter* 2070.

*METRIC SYSTEM:*

1. *Explanations and Arguments in favour of the adoption of the Metric System in the United Kingdom.*
2. *Suggestions to the Effect that the System be legalised and made permissive for a certain Transition Period, and that at the Termination of such Period it be compulsory.*
3. *Objections to the System, and to any Compulsion in the Matter.*
4. *Conclusions of the Committee.*

1. *Explanations and Arguments in favour of the adoption of the Metric System in the United Kingdom:*

View of witness that the advantage of having a system of weights and measures in keeping with the basis of notation far out-weighs the objection that the number ten is not divisible by certain numbers without a remainder; non-objection to vulgar fractions where it is more simple and easy to use them, *Dowson* 321–325——Absence of any serious objections to the metric system, *ib.* 383–386——Grounds for the opinion that the introduction of the metric system into England would be found to be far easier than is generally supposed; anticipation that the transition would not be more difficult here than it was in Germany, *Wollmer* 955, 956. 1073–1099.

Anticipation that the adoption of the metric system would not meet with much opposition or cause any great disturbance in this country; belief that the change would be welcomed by manufacturers and traders, *Debenham* 1158–1163. 1171 *et seq.*——Advantages of the metric over the present system from an educational and scientific point of view; practical impossibility of performing many of the operations in physical and chemical work without the metric system, *Dr. Gladstone* 1338–1342——Opinion that the metric system could be easily introduced into England, *ib.* 1353, 1354.

Examination to the effect that it might be better, on the whole, to at once adopt the metric system, as already used in several foreign countries than the cental, though the former would involve greater difficulties at first, *Woodward* 1867-1910——Advocacy of the general adoption of the metrical system in this country, on the score of simplicity and economy and in the general interests of trade, *Rowlett* 1726 *et seq.*——Reference to some lectures by witness and to the tables and illustrations used in order to prove the great simplicity of the metric system, *ib.* 1942, 1943.

Objection to decimals being applied in connection with the present complicated system, it being very essential on the score of foreign trade and foreign competition that the complete metric system as in France and Germany should be adopted in England, *Rowlett* 2012 *et seq.*——Belief that the delay in adopting the metric system in England is entirely due to misapprehension as to its great advantages; appreciation of its value by every country where it has been since adopted, *Pilter* 2082–2086.

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*METRIC SYSTEM*—continued.

1. *Explanations and Arguments in favour of the adoption, &c.*—continued.

General approval of the metric system by the press and by public bodies, whilst the opposition of individuals is based on misapprehension, *Johnson* 2170–2174—— Desirability of adopting the metrical system provided it can be done without drawbacks, *Giffen* 2210. 2219, 2220. 2230–2234.

Opinion that the disturbance arising from a change of systems would not be more severely felt here than elsewhere, and that boys and girls could easily initiate their parents into the new system, *Pollard* 2316. 2326–2329——Preference of witness for an entirely new system rather than the decimalisation of pounds, shillings, and pence, *ib.* 2345–2349——Resolution passed unanimously at the last annual meeting of the Incorporated Society of Inspectors of Weights and Measures in favour of metric weights and measures; entire dissent on the question from the views of Mr. C. F. Howard, *Kyle* 2898–2903. 2942, 2943.

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2. *Suggestions to the Effect that the System be legalised and made permissive for a certain Transition Period, and that at the Termination of such Period it be compulsory:*

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Decided opinion that the general public would gain by the substitution of the metric for the present system; recommendation that the former system should be made optional for two years, and then compulsory, the fines being only nominal, and great tolerance being shown in country districts, *Debenham* 1164–1185. 1201–1234——Desirability of the metric system being made optional at first, and after a time compulsory; advisability of teaching the system in all elementary schools as a means of popularising it, *Umney* 1491–1493. 1511–1536. 1541–1549. 1579–1582; *Howard* 1609–1625. 1633–1637. 1644–1649.

Belief that traders generally, and the public, would readily come, after a time, under the metric system, which, after three years, should be made compulsory, *Rowlett* 1945, 1946. 1949–1955. 1961–1967. 1978–1982. 2042–2044——Conclusion that the system should be made compulsory in England, and that an internal of twelve months would be ample for its comprehension, *Pilter* 2087–2097.

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Recommendation that there be a transition period of two years during which the adoption of the metric system should be optional, and that at the end of that period compulsion should apply, *Kyle* 2909——Advantage of the people generally having full facilities during the transition period for becoming conversant with the new system; belief that the change would cause but little trouble or unpopularity, *ib.* 2910, 2911. 2916–2918.

Opinion that after a comparatively short transition period the change to the metric system in this country should be compulsory, the difficulty of making the change having been greatly exaggerated, *Lord Kelvin* 2940–2944.

3. *Objections to the System, and to any Compulsion in the Matter:*

Contention that the metric system cannot be called simple, as it involves more figures, and much more chance of mistake, than the present English system; stress laid upon the great importance of mental arithmetic, *Sir F. J. Bramwell* 2440–2447. 2500 *et seq.*, 2563–2586 ——Opinion that if the metric system be imposed upon this country, to the exclusion of the present system, nothing less than coercive measures will suffice to enforce its use, *ib.* 2466.

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3. *Objections to the System, and to any Compulsion, &c.*—continued.

Evidence in support of witness' objection to the compulsory introduction of the metric system into England, showing the inconvenience of having to order goods by the gramme, decigram, dekagram, kilogramme and litre; non-objection to the permissive use of the system, *Sir F. J. Bramwell* 2471-2479. 2595-2604.

Grounds for the conclusion arrived at by witness, whilst protesting strongly against any disturbance of our existing units, that facilities should be given for decimal calculations and measurements; instances illustrative of the difficulties that would arise from a compulsory change of system, *Stephenson* 2828, 2829. 2834-2840. 2847-2849. 2855-2862.

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4. *Conclusions of the Committee:*

Belief that the adoption of the metrical system by England would tend to render the system universal, *Rep.* iii.

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*Mile.* Statement that although the Scotch and Irish miles differ from the English mile they were both made up from the same unit of an English yard, *Chaney* 246-252—— Division of the old English mile into ten furlongs ten chains and ten fathoms as far back as the thirteenth century; near approximation of the yard of the fifteenth century to the present metre, *Dowson* 336-338.

*Monmouth County Council.* Resolution adopted by the county council of Monmouth in favour of the metric system, *Johnson* 2164, 2165.

N.

*Norway.* Evidence to the effect that the change to the metric system was effected suddenly in Norway with practically no difficulty, the question being regarded as one that had been fought out in France at the beginning of the century, *Sir B. Baker* 2618-2621.

P.

*Peru.* Public notice given by the Consul General of Peru in 1891 that all invoices for cotton, wool, linen and silk must declare the length of each piece in metres, and the weight of the package in kilogrammes, *Dowson* 374, 375.

*Pharmacopœia.* See *Drugs and Chemicals.*

*Pilter, John.* (Analysis of his Evidence.)—Representation by witness of the British Chamber of Commerce in Paris; he has had considerable experience of trade between England and France, 2049-2053. 2113.

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*Pollard, Arthur Tempest.* (Analysis of his Evidence.)—Is Head Master of the City of London School, 2281, 2282.

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*Press, The.* Marked change in the tone of the Press on the question at issue, a large proportion of the leading journals being now decidedly in favour of the metric system, *Johnson* 2170, 2171.

*Prytz, Professor K.* (Analysis of his Evidence.)—Witness is Professor of Physics at the Copenhagen University and Technical Institution; has paid some attention to the question of weights and measures in Denmark, 1364, 1365.

Information respecting the system of weights and measures in use in Denmark, the pound, which is exactly half a kilo, being divided into hundreds, and the foot into twelve parts; limited use of English weights and measures there, principally by engineers, 1366–1377. 1405–1436—— Statement that the weights and measures in Denmark are stamped, but that no inspectors are appointed, 1378.

Proposal made in the Danish Parliament to introduce metric weights and measures, the higher classes being in favour of that system, while the lower classes are against it; opinion that it would be an advantage to adopt the metric system, seeing that Denmark is surrounded by countries using it, 1370–1389. 1421–1426. 1437——Evidence to the effect that although the metric system has not been legalised in Denmark, it is permitted, and is much used in the Army and for the foreign trade of the country, 1391–1420.

R.

*Rejected Weights and Measures.* Submission of a Return showing that the total number of weights and measures rejected during the past year as unfit to be stamped was 846,457, and that 1,015,519 were returned to be re-adjusted, *Chaney* 291–294; *App.* 192.

*Retail Trade.* Belief that the greatest users of weights and measures are the retail buyers and sellers, *Chaney* 125——General estimate that there are about five-and-a-quarter millions of weights in use in the retail trade in this country, *ib.* 253.

Estimate that a change in the system of weights and measures would involve an average cost of 1*l.* 8*s.* 6*d.* to each retail trader for new weights and measures, or about 80,000*l.*

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*Retail Trade*—continued.

80,000*l.* for the whole retail trade of London, and 720,000*l.* for the United Kingdom, with a very small allowance for the weight of old metal, *Spencer* 753–758. 776, 777——Probability that if the metric system were adopted the small purchaser would gain in some cases and lose in others; no doubt that the metric system would simplify book-keeping and calculations for ready-money purchases, *ib.* 762, 763. 782–785. 791–810——Belief that there is no desire for the metric system in the home trade, the retail traders being, on the whole, against it; probability that their non-appreciation of it is due to ignorance, *Street* 857–861. 907–910. 933–940.

Examination as to the precise mode in which compulsion should be applied and as to the difficulties likely to arise in the retail trade by dispensing with yards, ounces, pounds, &c., witness contending that in course of time traders and the people generally would fall in with the new system, *Rowlett* 1978 *et seq.*——Admitted difficulty in making it illegal to sell in small quantities by the present weights and measures; doubt, however, as to much inconvenience, even in the retail trade, under a decimal system, *ib.* 1989–1997. 2012–2017.

*See* also *Alteration and Conversion of Weights and Measures. London. Metric System. Trade.*

*Rowlett, W. T.* (Analysis of his Evidence.)—Witness, who is largely engaged in the cotton yarn trade at Leicester, submits sundry details as to the complication, inconvenience, and injury through the present system of weights and measures in the case of the foreign yarn trade, 1911 *et seq.*

Illustrations in the import of yarns from France and Germany, and in their export thereto, of the increased and complicated calculations and the increased expense through the metrical system not being in force in this country as on the Continent, 1914 *et seq.*

Advocacy of the general adoption of the metrical system in this country, on the score of simplicity and economy, and in the general interests of the trade, 1926 *et seq.*

Strong support of the metric system by the working men of Leicester, 1931–1933. 1970–1973——Belief that the objection on the part of Manchester cotton spinners might soon be removed, 1934. 1968, 1969——Calculations made by witness in kilogrammes in his purchases in France; impression that the kilogramme is a legal weight in this country, 1935–1938. 1949, 1950.

Consensus of opinion among public bodies in Leicester in favour of the introduction of the metric or decimal system, 1939. 2045——Recommendation that the teaching of the metric system be first made compulsory in board schools, with a view to its compulsory adoption eventually for trade purposes, 1940–1942. 1962–1966. 1978–1982. 2028–2032. 2045——Reference to some lectures by witness and to the tables and illustrations used in order to prove the great simplicity of the metric system, 1942, 1943.

Numerous different weights and measures in use in Leicester for wool, meat, fruit, &c., 1944. 1947, 1948——Belief that traders generally and the public would readily come, after a time, under the metric system, which, after three years, should be made compulsory, 1945, 1946. 1949–1955. 1961–1967. 1978–1982. 2042–2044——Facility in the introduction of the metric system into Germany, 1946. 2025. 2027. 2035. 2039–2041——Great inconvenience to engineers under the present system, 1957——Simplicity of the metric system as regards mental calculation, 1976, 1977.

Discussion as to the precise mode in which compulsion should be applied, witness contending that, in course of time, traders and the people generally would fall in with the new system, 1978 *et seq.*——Admitted difficulty in making it illegal to sell in small quantities; doubt as to much inconvenience, even in the retail trade, under a decimal system, though some difficulty would arise, 1989–1997. 2012–2017——Consideration of alleged difficulties in the case of gas meters and pipes, and of the sale of gas and of the residual products under the metric system, 1998–2011.

Objection to decimals being applied in connection with the present complicated system, it being very essential, on the score of foreign trade and foreign competition, that the complete metric system, as in France and Germany, should be adopted in England, 2012 *et seq.*——Circumstance of America having begun to introduce the metric system, 2020——Contemplated discontinuance eventually of the terms, inches, feet, yards, miles, and acres, the people being educated up to the new system, as already accomplished in other countries, to the disadvantage of England, 2022–2044.

Unanimous resolution of the Associated Chambers of Commerce in favour of the adoption of metric weights and measures, 2045. 2047, 2048——Similar resolution passed by the Durham County Council and by the Association of School Boards in London, 2046.

*Royal Commission of* 1869. Summary of the conclusions arrived at by the Royal Commission of 1869 in the Report which dealt with the metric system: main recommendation that the system should be recognised internationally, *Chaney* 59–65.

Report, 1895—*continued.*

*Russia.* Introduction of the metric system in Russia this year by Royal decree, for medicines, *Umney* 1483–1486——Distinct system in Russia, the price of grain being made per pood of thirty-six pounds; doubt as to there being any desire in Russia for the decimal system of Germany or France, *Lenders* 1663–1667. 1694, 1695.

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*Sankey, Captain H. R.* (Analysis of his Evidence.)—Witness is one of the directors of Willans and Robinson, Limited, engineers at Thames Ditton, 1235, 1236. 1250–1254. 1282, 1283.

Evidence to the effect that witness' firm adopted the metric system of measures in order to be able to work interchangeably with their foreign manufacturers, 1237–1254. 1280–1283—— Non-objection on the part of English manufacturers and customers to dealing on the basis of the metric system, 1245–1248.

Statement that there was absolutely no difficulty with the workmen when the metric measure was adopted, and that they are now practically unanimous in favour of the new system, 1255 *et seq.*; 1284–1293——Explanation of two drawings of a cylinder, one being in English measurements and the other according to the metric system, showing that the latter method is much more simple, expeditious, and accurate than the former, 1257 *et seq.*

Particulars of an error which occurred when using the English measure, which could not have happened under the metric system, 1261–1269——View of witness that, although the metric system is not yet common in engineering works, there is no reason why it should not be so, 1273–1279. 1286–1290.

*Schools (Teaching of Metric System):*

Grounds for the opinion that the adoption of the metric system of weights and measures in the schools of this country would be a great relief to the hard-worked scholars; two pamphlets, prepared by witness, to facilitate the teaching of the system, submitted, *Dawson* 308 *et seq.*; 427–430——Desirability of the metric system being more efficiently taught in schools, if it be decided to adopt it, and of full explanatory information respecting it being freely distributed to tradesmen and the public, *Spencer* 768, 769——Absolute necessity of the metric system being taught in the schools of the country as a preparatory step for the introduction of that system, *Wollmer* 997. 1029. 1118. 1121.

Detailed explanation as to the amount of time now given to arithmetic in elementary public schools, the heaviest part of the work falling on Standard IV., where extra time is devoted to the subject; opinion that very little time would be necessary for learning the metric system, *Gladstone* 1295–1313. 1355——Disagreement with the suggestion that it is a good thing for children to learn the English system of weights and measures as a kind of mental gymnastics, *Gladstone* 1310, 1311; *Pollard* 2290, 2291. 2302.

Evidence to the effect that the metric system was taught in board schools years ago, but was dropped; fear that although the system has been placed in the Code again, there is practically very little teaching of the subject, *Gladstone* 1314–1318——Desirability of further steps being taken for the instruction of children in the system in view of its possible adoption in England; recommendation that decimals should be taught before vulgar fractions, *ib.* 1319–1324. 1343–1360.

Fear that the pupil teachers' schools are worse off than the ordinary schools in regard to the teaching of the metric system; belief that the masters would welcome a change from the present to the metric system, *Gladstone* 1325–1331——Neglect of the teaching of the metric system due to the additional time and trouble required, and to the fact that strange words are used in connection with it; opinion that there are no real difficulties in the matter, *ib.* 1332–1337. 1345–1351. 1362, 1363.

Approval of the metric system being introduced gradually into England in a permissive form before it is made compulsory, it being also recommended that the system should be taught in the schools, *Umney* 1491–1493. 1511–1536. 1541–1549. 1579–1582; *Howard* 1609–1625. 1633–1637. 1644–1649; *Uttley* 2710–2715——Opinion that decimal fractions should be taught before vulgar fractions in the schools, and that children should be taught to decimalise pounds, shillings, and pence; no doubt that teaching the present system of weights and measures is a great waste of time, *Howard* 1613–1626. 1642, 1643.

Recommendation that the teaching of the metric system be first made compulsory in board schools with a view to its compulsory adoption eventually for trade purposes, *Rowlett* 1940–1942. 1962–1966. 1978–1982. 2028–2032. 2045——Resolution adopted by the Association of School Boards in London in favour of the metric system, *ib.* 2046.

Report, 1895—*continued.*

*Schools (Teaching of Metric System)*—continued.

Extreme simplicity of the metric system so that it can be taught to children with the greatest facility, *Pilter* 2057. 2060. 2063. 2075, 2076. 2093. 2099–2107——General consensus of opinion among school boards in favour of the adoption of the metric system, *Johnson* 2154–2161.

Grounds for the opinion of witness and his colleagues at the City of London School that a decimal system would be advantageous and would effect an enormous saving of time; calculations in order to prove that a third of the time now devoted to arithmetic in schools would be saved, *Pollard* 2283–2289. 2292, 2293. 2311, 2312. 2314, 2315. 2317–2325. 2330–2333. 2357. 2363–2365——Reference to the practice of teaching vulgar fractions before decimals; opinion that decimals should follow the first four rules, *ib.* 2294–2301. 2313—— Experience to the effect that the tables learnt at school are generally forgotten, *ib.* 2303, 2304. 2333–2341——Discussion as to the necessity of putting useless arithmetical questions to boys, *ib.* 2342–2344. 2359, 2360.—— Statement that boys are not now taught the basis of the Imperial system, *ib.* 2350–2356.

Contention that there are tables to be learnt under the metric system as well as under the present system, there being different denominations in the former case for the various weights under the system, Sir *F. J. Bramwell* 2544–2553——Desirability of the metric system being taught in schools, Sir *B. Baker* 2641, 2642——Belief that much school time will be saved by the use of the metric system, as in the United States, *Egleston* 2776, 2777.

Disapproval of imposing the metric system upon children in schools as a matter of dogma; allusion hereon to the arguments of Mr. Beresford Hope, Sir George Airey, Mr. Chisholm, &c., *Stevenson* 2850–2852.

Resolutions passed by certain School Boards, &c., in favour of the metric system, *App.* 203.

Strong evidence before the Committee as to the serious loss of time incurred by English school children in having to learn the complicated system of tables of existing weights and measures, and as to the urgent need of the adoption of a new system, *Rep.* iii.——Recommendation that the metrical system of weights and measures be taught in all public elementary schools as a necessary and integral part of arithmetic, and that decimals be introduced at an earlier period of the school curriculum than is the case at present, *ib.*

*See* also *Vulgar Fractions.*

*Scientific Calculations.* Testimony to the great value and simplicity of the metric system for scientific calculations, as compared with the present anomalous and complicated system of weights and measures, *Lord Kelvin*, 2937, 2938. 2953. 2959——Illustration in the case of the trade in scientific instruments of the injurious operation of the present system, *ib.* 2945, 2946——Exception taken to the views of Sir John Herschell and Sir George Airey many years ago adverse to the metric system, *ib.* 2953, 2954.

*Scotland.* Numerous public bodies in Scotland who have passed resolutions in favour of metric weights and measures, *Johnson* 2166.

*Select Committee of* 1862. Account of the investigation made during the last thirty years as to the desirability of a change in the present system of weights and measures; submission that the Reports of the Select Committee of 1862 and of the Royal Commission of 1869 afford the best existing evidence on the subject, *Chaney* 51–65. 230——Statement as to the Select Committee of 1862 having recommended that the metric system should be rendered legal, but not compulsory, until it was sanctioned by the general conviction of the public; summary of the recommendations of the Committee, *ib.* 52–59. 242, 243.

*Sheffield.* Detailed account of the public action taken in Sheffield since 1891 with a view to the introduction of the metric system of weights and measures into this country; resolutions passed by the City Council and the Federated Trades Council in favour of the system, *Uttley* 2690–2707——General opinion, not only of the working men, but of the manufacturers, of Sheffield that it would be a very great advantage to adopt the metric system as the National system, *ib.* 2708–2710. 2720–2725.

Book handed in by witness, containing the equivalents of the two systems of weights and measures, showing that some of the manufacturers see the importance of having tables, *Uttley* 2747, 2748.

*Shipping.* Belief that the English ton register of shipping is very general, *Giffen* 2226–2228.

*Shuker, John.* (Analysis of his Evidence).—Inquiries made three or four years ago by an Association of which witness was Chairman, as to the desirability of one uniform weight for the sale of corn, &c., throughout the whole country; numerous responses received,

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*Shuker, John.* (Analysis of his Evidence)—*continued.*

about 75 per cent. being in favour of the hundredweight and the ton as the standard, 1767–1779. 1793–1795. 1802. 1833, 1834.

Objections received, mainly from the eastern and western counties, to the foregoing standard, and in favour of the retention of the various local weights; anomalies and complication through the different weights and measures in Cornwall, Norfolk, and other counties, 1772–1778. 1786–1792. 1806, 1807. 1835–1838——Limited extent to which the cental was approved of during the foregoing inquiries; objection to its adoption generally, as compared with the hundredweight and ton, 1773. 1783–1785. 1796–1801.

Examination in support of the contention that the hundredweight and ton, as being well known and recognised throughout the country, should be the uniform legal standard, and that the universal adoption of the decimal or metric system, as in other countries, would involve great disturbance to trade, and would, for a long time, be difficult of comprehension by farmers, 1779 *et seq.*

*Siemens, Alexander.* (Analysis of his Evidence).—Witness is a Past-President of the Institution of Electrical Engineers, a Member of the Institute of Civil Engineers, a Member of the Council of the Society of Arts, and a Director of Siemens Brothers and Company, Limited, 480.

Information respecting witness' firm, which was established in 1847, and makes all kinds of instruments and apparatus connected with the application of electricity for use in ordinary life; branches of the firm all over the world, 481 *et seq.*——Adoption of the metric system by witness' Austrian house as soon as it was introduced into Austria, the English house having only been forced to adopt it within the last fifteen years for the foreign trade, 483–487.

Statement that the change from the imperial to the metric system took place gradually and without difficulty, the men considering it an improvement; great convenience of the millimetre as a unit for small and accurate work, 486–493——Non-adoption of the metric system by the majority of English engineers up to the present time, except for work which is destined for abroad, 491–494.

Great inconvenience of the duplication of patterns, &c., due to the necessity of using the imperial system for goods for home consumption, and the metric system for the foreign trade; belief that the adoption of the metric system by England would effect a great saving of labour throughout the commercial world, 494–502. 569. 613–646——Short account of the introduction of the metric system into Germany, where it was adopted in 1868, and made compulsory in 1872; explanations as to the slight objections that were raised at the time, 503 *et seq.*; 543 *et seq.*; 593–595. 647–658.

Contention that the terms used in the metric system are of classic origin; failure of the attempts to use native names in lieu of them in Germany, Holland, and Sweden, 508–513——Absence of necessity for any special teaching of the metric system in Germany, on account of its simplicity; submission by witness of some German school books on the subject, 514–519. 538–543. 643.

Use of the metric system for weighing and mixing medicines in Germany, 520——Particulars of the system under which the standards of the metric system are maintained and verified in Germany, the method of verifying and stamping the metric weights and measures in use being much the same as in England, 521–528.

Suggestions as to the way in which some of the imperial weights could be converted into metric weights if the metric system were adopted in England, 528–534——Submission of books and pamphlets published in Germany when the metric system was introduced, showing the official proportions of the old units to the new ones, 535–538.

Probability that the old German system of weights and measures was more complicated than the present English system; opinion that the change to the metric system could be more easily made in England than it was in Germany, 544–550. 574–578. 600–658——Certainty that it is the international consideration that makes the desire for the adoption of the metric system here so overwhelming; necessity of assisting the British manufacturer, in view of the efforts made by foreign countries to extend their trade, 548, 549. 566. 570–572. 590–650.

Copy of book handed in by witness in connection with the introduction of the metric system into Austria, where the new system was permissive from the 1st January 1873 to the 1st January 1876, and compulsory after that date; there was no objection whatever to this change, 551–559. 581–589——Explanation that the change from the old to the metric system in Germany and Austria was so much easier than in France because the conditions were entirely different in the two cases, 560–567. 579, 580.

Division of the foot into ten and 100 parts by surveyors and engineers; practice of some insurance offices to make all their calculations by decimals of a pound, 568——Disapproval of the suggestion to decimalise the units of the imperial system, on the ground

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*Siemens, Alexander.* (Analysis of his Evidence)—*continued.*

ground that all the trouble of a change would be incurred without any permanent result, 613–658.

*Spencer, Alfred.* (Analysis of his Evidence.)—Witness is chief officer of the Public Control Department of the London County Council; has paid some attention to the question of weights and measures, 735, 736.

Evidence to the effect that the Weights and Measures Acts are carried out in London under witness' Department independently of the Board of Trade; necessity, however, of the Council's inspectors having a Board of Trade certificate of competency, 737–744——Information relative to the verification and stamping of the weights and measures used in trade, London, excepting the City, being divided into thirteen districts for the purpose, each with an inspector, the total staff consisting of seventy men, 745 *et seq.*

Statistics in connection with the stamping of weights and measures in London, showing that the total number submitted for verification and stamping last year was 1,300,000, of which 300,000 were rejected as unfit, 748–752——Estimate that a change in the system of weights and measures would involve an average cost of 1*l.* 8*s.* 6*d.* to each retail trader for new weights and measures, or about 80,000*l.* for the whole retail trade of London, and 720,000*l.* for the United Kingdom, with a very small allowance for the weight of old metal, 753–758. 776, 777. 787–790.

Satisfactory working of the present Imperial system of weights and measures so far as the London retail trade is concerned; preference of witness for the metric system if a change is to be made, 759–761. 794–807. 836–843 —— Recommendation of the inspectors that the troy and apothecaries' weights should be abolished, and the avoirdupois weight substituted; non-objection to the metric weights being substituted instead of the avoirdupois, 759–761. 780, 781. 844.

Probability that if the metric system were adopted the small purchaser would gain in some cases and lose in others; no doubt that the metric system would simplify book-keeping and calculations for ready money purchases, 762, 763. 782–785. 791–810 —— Practice of the wholesale butchers to buy by a stone of 8lb.; 764, 765. 786.

Opinion that two or three years should be allowed before any new system of weights and measures be admitted to general use, and a further time before it be made compulsory, 766, 767. 779. 796–803. 818–843——Desirability of the metric system being more efficiently taught in schools, if it be decided to adopt it, and of full explanatory information respecting it being freely distributed to tradesmen and the public, 768, 769.

Resolution of the London County Council, at the instance of the London Chamber of Commerce, to support a Bill providing for the permissive use of the metric system for foreign trade; belief that no confusion would result from a national and an international system running together, 770–775. 793. 806–843.

*Stamped Weights and Measures.* Return submitted (*App.* 178) showing that three and a-half millions of weights and measures used in the retail trade were verified and stamped by the local inspectors of weights and measures in 1893–94; explanation that no metric weights and measures are stamped, *Chaney* 81–103. 237.

*See* also *Inspectors. London.*

*Standard Weights and Measures.* Institution of the Standards Department of the Board of Trade in 1866; creation of its present duties and powers, which include the custody and periodical verification of standards of measure and weight, by the Weights and Measures Act of 1878, which transferred to it the duties and powers of the Comptroller General of the Exchequer and the Warden of the Standards, *Chaney* 2–5. 54, 55 —— Verification by the Department of the local standards of weight once in five years and of the local standards of measure once in ten years, the imperial standards being compared every twenty years with the original standards, which are immured in the walls of the Houses of Parliament, *ib.* 6–12. 206, 207.

Statement that the imperial system of weights and measures is based on the pound weight and the yard measure, and that from these two standards are derived all other weights and measures in use in this country in connection with that system; dependence of the unit of length on the temperature and of the unity of weight on the latitude of the place, *Chaney* 13–16. 150–152.

List of Board of Trade standards for weights and measures of different kinds, *App.* 182, 183.

*See* also *Verification of Weights and Measures.*

*Stevenson, James* (Member of the Committee). (Analysis of his Evidence.)—Witness is a Member and Fellow of the Institute of Chemistry, and has been a chemical manufacturer for fifty years, 2827.

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*Stevenson James* (Member of the Committee). (Analysis of his Evidence)—*continued.*

Grounds for the conclusion arrived at by witness, whilst protesting strongly against any disturbance of our existing units, that facilities should be given for decimal calculations and measurements; instances illustrative of the difficulties that would arise from a compulsory change of system, 2828, 2829. 2834–2840. 2847–2849. 2855–2862——Convenience of the use of the Troy ounce for valuable articles, 2830–2833——Attention of witness called to the successful adoption of the metric system by Germany, 2841, 2842, 2853, 2854.

Reports quoted by witness as to the views of several consuls which tend to prove that the slackness of trade with metric countries is not entirely due to the use of different systems, 2843, 2844——Necessity for manufacturers to adapt their trade circulars to the language of the country to which they are sending, 2844. 2855, 2856——Illustrations showing that it is the practice of foreign manufacturers when sending to England to adapt their goods to our system of weights and measures, 2844, 2845.

Evidence from the different consuls in the United States of America in regard to the custom of quoting the price of cereals per bushel, and the prices of bacon, pork, &c., in pounds, 2845–2847. 2849——Quotation read by witness expressing the opinion of Dr. Harter, the head of the central laboratory of the United Alkali Company, viz., that for analytical purposes the grain is in every way superior to the metrical units, 2849.

Reference to the report presented to the House of Representatives in 1821 by John Quincey Adams, then Secretary of State, who, in spite of an enthusiastic desire for a common system of weights and measures, came to a conclusion adverse to the metric system, 2849, 2850——Disapproval of imposing the metric system upon children in schools as a matter of dogma; allusion hereon to the arguments of Mr. Beresford Hope, Sir George Airey, Mr. Chisholm, &c., 2850–2852.

*Stone Weight.* Explanation that the anomaly that still remains in regard to the weight of the stone only exists in the wholesale meat trade, *Chaney* 244, 245——Custom of wholesale butchers in London to buy by a stone of 8 lb., *Spencer* 764, 765. 786——Practice of the butchers in the City meat markets to quote the price of their meat at per 8 lbs. since the Corporation drew their attention to the fact that the 8 lb. stone is illegal, *Street* 875–884. 911–917. 932.

*Strachey, General Richard.* (Analysis of his Evidence.)—Witness, who is a Fellow of the Royal Society, has had a great deal of experience in connection with the attempt to introduce a system of weights and measures into India some years ago, and upon the whole question of accurate measurements, 659–661.

Short history of the futile attempts made since 1833 to evolve order out of the complete state of chaos in which the weights and measures of India had remained from a very distant past; although witness' recommendation in 1867 to eventually adopt the metric system was passed into law, it has been a dead letter, 662–702. 723–725.

Absence of any recognised or authorised legal weight or measure in India at the present time; illustration of the great variation in the weight of the ordinary seer, 663–682.

Submission by witness of a copy of his memorandum of 1867 with reference to the inquiry by the Departmental Committee in that year; grounds for the opinion that the metric was the best system to recommend under the circumstances, adopting intermediate and subsidiary weights and measures in order to lead up to it, 673–689.

Objection of witness to the bastard scheme based on the English pound and foot divided partly decimally and partly in sixteenths, as propounded by the Committee in 1867; 685–690.

Adoption of the mètre for narrow gauge railways in some parts of India in 1870; belief that there are now about 8,000 miles of mètre gauge railway in the country, and that the whole of the railways of Burmah are of that gauge, 703–705——Certainty that the adoption of the metric system in England would facilitate the adoption in India of the system recommended by witness; reference hereon to a Report of 1870 as to the cost of the necessary material appliances for India, 706–711.

Legality of the kilogramme in India, 708——Statement that the mètre, which is not a legal measure, is as near an approximation to the yard as the average Indian guz, 709——Opinion that the introduction of the metric system would be of great advantage to India; no doubt that the great difficulties in the way of the change could be overcome, especially if the new system be put in force on the railways, 712–734.

*Street, Alfred John.* (Analysis of his Evidence.)—Witness is the Chief Inspector of Weights and Measures for the City of London, 847.

Approval of the metric system by the large wholesale dealers, especially those who transact business with foreign merchants; experience of witness that the system is largely employed in the City, 848–856. 887, 888.

Belief

*Street, Alfred John.* (Analysis of his Evidence)—*continued.*

Belief that there is no desire for the metric system in the home trade, the retail traders being, on the whole, against it; probability that their non-appreciation of it is due to ignorance, 857–861. 907–910. 933–940.

Statement that the majority of bullion and diamond merchants, jewellers, and silversmiths are in favour of the adoption of the metric system; difficulty in regard to the use of the obsolete twelve-grain weight, 862–871. 918–931——Opinion that it would cost more to convert the present weights into metric weights than to provide new ones; desirability of altering the larger weights, if possible, 872–886.

Practice of the butchers in the City meat markets to quote the price of their meat at per eight-lbs. since the Corporation drew their attention to the fact that the eight-lb. stone is illegal, 875–884. 911–917. 932——Particulars of the alterations necessary in order to convert lever-weighing machines to meet the requirements of the metric system, the conversion being comparatively easy, 889–895.

Desirability, if the metric system be adopted, of the new weights and measures being stamped to show both the metric weight or measure and its equivalent in the imperial system; also of explanatory cards being exhibited in shops, 896–906. 925–930——Personal opinion of witness that the adoption of the metric system would facilitate trade, 933–940.

*Sweden.* Facility with which the change from the old complicated system to the metric system was accomplished in Sweden, *Dowson* 399.

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*Textile Goods.* Information as to the difficulties that arise in witness' trade in consequence of the difference between the system of weights and measures in England and that in the foreign countries dealt with, *Debenham* 1137–1146. 1153 *et seq.*——Feeling among the textile importers, who buy according to the metric system and sell according to the imperial system, that they are handicapped as against the foreign producer; no doubt that if the producer converts metres into yards he charges for his trouble, *ib.* 1139–1147. 1218–1220.

Statement that the complexity of the calculations in the textile trade, incidental to the necessary conversion of our system of weights and measures into the other, is materially increased by the difference in the money systems, and is very detrimental to the English buyer abroad, *Debenham* 1148–1152——Advantage of the metre over the yard in witness' business where small measurements are frequently required for valuable goods, *ib.* 1156, 1157.

*Timber.* Detailed information as to the disputes arising in the timber trade owing to the differences between the tape and string measurement, *Wallace* 2235–2237——Necessity for a universal system of measurement, viz., the tape measure, *ib.* 2237–2239. 2245–2247. 2256–2263. 2268–2270——Difficulties experienced by witness in attempting to open up a timber trade with Belgium, *ib.* 2239.

Reference to the method formerly adopted by Customs officers for the measurement of timber, *Wallace* 2264–2267——Practice of railway companies to carry timber by dead weight, *ib.* 2271–2274. 2277–2280.

*Ton.* Evidence as to the falling through of a contract made by witness with a New York firm for 5,000 tons of hay, owing to the difference between an American and an English ton, *Wallace* 2239, 2240. 2275.

*Town Councils.* Explanation respecting the resolutions of town councils and of trades councils in favour of the metric system, *Johnson* 2162, 2163. 2165. 2183–2185.

List of resolutions passed by town councils in England in favour of the adoption of the metric system, *App.* 201–203.

*Trade (Generally).* Employment of the imperial system of weights and measures in the great bulk of the wholesale trade of the country, although the metric system is much used, chiefly for straw-plait goods, silk, cotton, and steel articles exported to the Continent; larger use of the metric system for manufacturing purposes, *Chaney* 104–117. 224–229.

Great inconvenience of the duplication of patterns, &c., due to the necessity of using the imperial system for goods for home consumption and the metric system for the foreign trade; belief that the adoption of the metric system by England would effect a great saving of labour throughout the commercial world, *Siemens* 494–502. 569. 613–646——Personal opinion of witness that the adoption of the metric system would facilitate trade, *Street* 933–940.

Statement showing the various parts of the British Empire in which the imperial system of weights and measures is in use for purposes of trade, *App.* 179–181.

Report, 1895—*continued.*

*Trade* (*Generally*)—continued.

Result of the evidence that not only is our foreign trade seriously handicapped, but that the home trade would be benefited if there were a more uniform and simple standard of weights and measures, *Rep.* iii.

*See* also *Foreign Trade. Grain, &c. Leicester. Metric System. Retail Trade. Standard Weights and Measures. Textile Goods. Yarns.*

*Trades Councils.* Lists of trades councils in favour of the metric weights and measures, *App.* 191. 201–203.

*Transition Period* (*Metric System*). See *Metric System*, 2.

*Troy Weight.* Gradual substitution of avoirdupois weight for troy weight from 1842 to 1855, the latter weight having been made illegal in 1878, *Chaney* 126–132. 208. 238——Convenience of the use of the troy ounce for valuable articles, *Stevenson* 2830–2833.

*Tunis.* Facility with which the metric system has been adopted in Tunis, *Pilter* 2085. 2099–2101.

U.

*Umney, Charles.* (Analysis of his Evidence.)—Witness is a partner in the firm of Wright, Layman, and Umney, manufacturing chemists and merchants of Southwark, chairman of the chemical section of the London Chamber of Commerce, honorary secretary to the Drug Club, and a member of the committee appointed by the Pharmaceutical Society of Great Britain to revise the "British Pharmacopœia," 1438–1442. 1487.

Statement that at the beginning of the century London was almost entirely the drug market of the world, and is so now to the extent of perhaps 70 or 80 per cent. of the trade, 1443——Evidence to the effect that drugs coming from abroad are weighed by the East and West India Dock Company, the metric weights on the invoices being disregarded, and the account sales made up on the English system; explanation that Germans buying in the London market have to use English weights, 1444–1455.

Grounds for the opinion that British interests have not been damaged by the strict adherence to imperial weights; desirability, however, of the introduction of the metric system, if the process be gradual, 1456–1458. 1494 *et seq.*; 1541 *et seq.*——Importation of chemical substances, chiefly from Germany; willingness of the German manufacturers to make up the consignments in English weights, without charging extra for doing so, 1459–1465. 1537–1540.

Instance of the inconvenience of the non-legality of the metric system when shipping drugs to South America; introduction by the London Chamber of Commerce of a Bill to legalise metric weights and measures, 1466 *et seq.*; 1561–1578——Submission by witness of letters (*App.* 197, 198) from firms in the drug trade complaining of the serious drawback they are subjected to in not being permitted to use metric weights and measures when exporting goods to foreign countries, 1466 *et seq.*; 1583–1593.

Refusal of the Customs authorities in some countries to pass goods unless they are made up according to the metric system, 1475–1483——Introduction of the metric system in Russia this year, by Royal decree, for medicines, 1483–1486.

Approval of the metric system being introduced gradually into England in a permissive form, before it is made compulsory; recommendation that the system should be taught in the schools, 1491–1493. 1511–1536. 1541–1549. 1579–1582——Statement that England is the only country of importance that has not adopted the metric system for medicines; certainty that the metric is much safer than the imperial system for making up prescriptions, 1496–1511.

*United States.* Metric system made permissible in the United States in 1866, the three old units of weight and measure having been the standard troy pound, the standard yard, and the Winchester gallon; dependence of the fundamental standards of the United States on the metric standards of Paris, *Chaney* 164–171. 239–241——Information relative to the increased attention now being given to the metric system in the United States; definite adoption of the system to a very wide extent there, *Dowson* 376–381——Movement in the United States in favour of the system, *Pilter* 2060. 2127–2129. 2145, 2146——Examination as to the system of weights and measures in America at the present time, *Giffen* 2222–2225.

Evidence showing that, in the States, the metric system is legal, but not compulsory; practice at the Custom Houses to have all invoices made out in both systems, *Egliston* 2752–2766. 2793–2802. 2804, 2805. 2821–2823——Explanation of the use made of the metric system in coining, *ib.* 2767–2769——Appointment of a committee by the Chairman of the House of Representatives to report to next Congress concerning the advisability of making the metric system compulsory, *Egleston* 2770–2773——Information respecting the decimal gauge adopted by various mechanical societies in the United States, *ib.* 2778–2780.

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Report, 1895—*continued.*

*United States*—continued.

Evidence from the different consuls in the United States of America in regard to the custom of quoting the price of cereals per bushel, and the prices of bacon, pork, &c., in pounds, *Stevenson* 2845–2847. 2849——Reference to the report presented to the House of Representatives in 1821 by John Quincy Adams, then Secretary of State, who, in spite of an enthusiatic desire for a common system of weights and measures, came to a conclusion adverse to the metric system, *ib.* 2849, 2850.

Reference to the feeling in the United States in regard to the metric system; testimony of John Quincy Adams as to the superiority of the British system, *Howard* 2879, 2880 ——Degree of complication under the partial adoption of a decimal system in the States, Lord *Kelvin* 2960–2963.

Reference by the Committee to the official investigation being carried out in the States, whilst the Federal Government has this year passed an Act rendering the metrical system compulsory for pharmaceutical purposes, *Rep.* iii.

*See* also *Utah.*

*Units.* Evidence to the effect that the fundamental Imperial units, viz., the pound and the yard, are not physical or natural constants, but are merely arbitrary standards, *Chaney* 22–28——Information respecting the metric system, the use of which has been permitted in this country since 1864 for certain express purposes only; explanation that the metre, kilogramme, and litre are arbitrary units, *ib.* 29 *et seq.*; 87–102. 153, 154. 204, 205.

Opinion that the advantages of the metric system can be secured for all practical purposes by the use of the three units, metre, litre, and kilogramme, and the sub-multiples of each as shown in Table B. (handed in), *Dowson* 326–328——Conclusion as to there being no necessity for a long list of difficult foreign names, *ib.* 326–328—— Sufficiency of the units, metre, litre, and gramme in the application of the metric system, *ib.* 327, 328.

Contention that the terms used in the metric system are of classic origin; failure of the attempts to use native names in lieu of them in Germany, Holland, and Sweden, *Siemens* 508–513——Disapproval of the suggestion to decimalise the units of the Imperial system on the ground that all the trouble of a change would be incurred without any permanent result, *ib.* 613-658.

Reference to the notation of the system as speaking for itself, the terms, metre, decimetre, centimetre, &c., being very readily comprehended, *Pilter* 2063——Vie s of Dr. Harter (Central Laboratory of the United Alkali Company) that for analytical purposes the grain is far superior to metrical units, *Stevenson* 2849.

Paper explanatory of the measures of length and of surface, the cubic or solid measures, and the measures of capacity, respectively, under the metric system, *App.* 185.

*See* also *Kilogramme.*

*Universal Adopton of Metric System.* Probability that if metric weights and measures were adopted by Great Britain they would be adopted throughout the civilised world, *Dowson* 382.

*Utah.* Considerable use of the metric system by the State of Utah, *Egleston* 2759–2761. 2789–2792. 2824–2826.

*Uttley, Stuart.* (Analysis of his Evidence.)—Witness is a member of the City Council of Sheffield and secretary of the Federated Trades Councils of Sheffield and district; has had a great deal of experience as regards weights and measures, 2685–2689.

Detailed account of the public action taken in Sheffield since 1891 with a view to the introduction of the metric system of weights and measures into this country; resolutions passed by the City Council and the Federated Trades Council in favour of the system, 2690–2707 ——Evidence to the effect that it was unanimously resolved at the Trades Congress at Glasgow in 1892 that it is highly desirable in the interest of the working classes and of the general trade of the country that the metric system of weights, measures, and coinage should be adopted, 2696–2704.

Approval of the metric system of weights and measures by the Town Council of Leicester, 2707——General opinion, not only of the working men, but of the manufacturers, of Sheffield that it would be a very great advantage to adopt the metric system as the national system, 2708–2710. 2720–2725.

View of witness that the metric system should be taught in the schools at once, and that its use should be made optional at first, and afterwards obligatory; calculation that the change would not cost the small shopkeepers more than about 30*s.* to replace their set of weights, scales, &c., 2710–2715. 2733–2746——Opinion that all anomalies in the shape of local weights and measures should be swept away at once, as being exceedingly stupid and out of date; belief that they would soon disappear if the metric system were established, 2716, 2717. 2726–2732.

Report, 1895—*continued.*

*Uttley, Stuart.* (Analysis of his Evidence)—*continued.*

Common interest of manufacturers and workers that the metric system should be adopted, several foreign orders having been lost to this country in consequence of the present system of weights and measures, 2718, 2719——Book handed in by witness containing the equivalents of the two systems of weights and measures, showing that some of the manufacturers see the importance of having tables, 2747, 2748.

V.

*Verification of Weights and Measures.* Verification by the Standards Department, for a small fee, of weights and measures, both Imperial and metric, for scientific use and chemical research, *Chaney* 118–124——Power of the Board of Trade to verify metric weights for the purposes of science and manufacture, but not for trade purposes, *ib.* 254–259. 279–281.

*Vulgar Fractions.* Grounds for approving of the use of vulgar fractions, even with the adoption of the decimal or metric systems, *Dowson* 321–326——Statement that vulgar fractions are still used in the countries that have adopted the metric system; anticipation that if the system be adopted here the use of vulgar fractions in connection with that system would be made illegal, *Sir F. J. Bramwell* 2479–2486. 2508–2514.

W.

*Wallace, Stewart* (Member of the House). (Analysis of his Evidence.)—Witness, who was formerly a timber merchant, submits detailed information as to the disputes arising in the timber trade owing to the differences between the tape and string measurement, 2235–2237——Necessity for a universal system of measurement, viz., the tape measure, 2237–2239. 2245–2247. 2256–2263. 2268–2270——Difficulties experienced by witness on attempting to open up a timber trade with Belgium, 2239.

Evidence as to the falling through of a contract made by witness with a New York firm for 5,000 tons of hay owing to the difference between an American and an English ton, 2239, 2240. 2275——Opinion that England could with very little difficulty conform to the system of weights and measurements in use in other countries, 2242. 2252–2255. 2260–2263.

Conclusion that our present system of weights and measures is a hindrance to foreign trade, 2247–2251——Reference to the method formerly adopted by Customs' officers for the measurement of timber, 2264–2267——Practice of railway companies to carry timber by dead weight, 2271–2274. 2277–2280.

*West Hartlepool School Board.* Resolution adopted by this Board in favour of the metric system, *App.* 203.

*Wigan School Board.* Resolution passed by this Board in favour of the metric system, *App.* 203.

*Willans & Robinson, Limited.* Evidence to the effect that witness' firm adopted the metric system of measures in order to be able to work interchangeably with their foreign manufacturers, *Sankey* 1237–1254. 1280–1283——Non-objection on the part of English manufacturers and customers to dealing on the basis of the metric system, *ib.* 1245–1248——Statement that there was absolutely no difficulty with the workmen when the metric measure was adopted, and that they are now practically unanimous in favour of the new system, *ib.* 1255 *et seq.*; 1284–1293.

*Winchester Measures.* Short account of the Winchester system of measures, which dates from the reign of King Edgar; references to the Reports of the Select Committees of 1835 and 1842 as to the difficulties experienced in making the change from Winchester to Imperial measure, *Chaney* 136–145.

*Wollmer, H. E.* (Analysis of his Evidence.)—Witness is interested in the firm of Sir Jacob Behrens and Sons, who carry on a business in textile goods, machinery, &c., in Manchester, Bradford, Glasgow, London, Calcutta, and Bombay; has had considerable commercial experience both at home and abroad, 941–954.

Grounds for the opinion that the introduction of the metric system into England would be found to be far easier than is generally supposed; anticipation that the transition would not be more difficult here than it was in Germany, 955, 956. 1073–1099——Difficulties experienced by witness' firm with regard to the present system of weights and measures in connection with the foreign trade; great expense and serious risk involved in converting English into metric weights and measures, especially when invoicing goods to South and Central American countries, 957 *et seq.*; 1083–1095.

View of witness that the necessity of introducing the metric system is much greater now than it was thirty years ago, so many countries having adopted that system, and foreign competition with England being so keen, 968–971. 985–988——Information as

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*Wollmer, H. E.* (Analysis of his Evidence)—*continued.*

to the actual expenditure now incurred in making calculations that would be totally unnecessary if the metric system were adopted, 971-975.

Attention drawn to the complicated table of weights now in use at Manchester for calculating the weight of yarns, the decimals of a grain going to three places, 976–982. 1025 *et seq.*——No doubt that the adoption of the metric system would disturb the yarn trade; non-objection, however, to the alteration, if it were universal, in view of the great advantage the metric system would be to the trade, 983, 984. 1014–1024. 1030 *et seq.*; 1059–1072.

Success of the Continental makers, in many instances, in taking the trade in spinning and weaving machinery away from Manchester; conclusion that when they have been unsuccessful it was simply because our machine makers had adapted themselves to the metric system at great expense and trouble, 988-992——Further reasons why it is, in witness' opinion, advisable to adopt the metric system; recommendation that if this be not done the decimal system should be formally adopted, 993–1011, 1030–1058. 1114–1117. 1125–1128.

Absolute necessity of the metric system being taught in the schools of the country as a preparatory step for the introduction of that system, 997. 1029. 1118–1121——Certainty that if the foreign manufacturers have to convert metric weights and measures into their English equivalents they will charge for their trouble whenever they can, 1003–1006. 1052–1058——Desirability of adopting the centigrade in lieu of the Fahrenheit thermometer in England, 1012, 1013.

Admission that it will be necessary to depart from the well-known English counts and make-up if the metric system be adopted for yarns, 1059–1072. 1101–1117——Certainty that if the metric system were introduced into India without being adopted here, the home textile manufacturers would be handicapped to a very serious extent, 1122–1124.

Evidence to the effect that, although Japan has adopted the metric system, the English system of weights and measures is in use there for textile goods, 1129–1132.

*Woodward, Harvey Cecil.* (Analysis of his Evidence.)—Considerable experience of witness as to the weights and measures used in the sale of grain and corn at Liverpool, 1856, 1857.

Summary of the circumstances which led to the adoption, several years ago, of the cental (100 lbs.) as the principal unit of sale in Liverpool, together with particulars as to its operation and its success; sale of a few articles, including flour, by the 112 lbs.; 1858 *et seq.*——Information as to the extent to which the adoption of the cental has spread outside Liverpool, witness advocating its compulsory application throughout the whole country, 1864 *et seq.*

Great anomaly and complication under the varying system of weights and measures in different counties, one uniform compulsory standard being greatly needed in the interests of the public as well as of traders, 1865 *et seq.*——Examination to the effect that it might be better, on the whole, to at once adopt the metric system, as already used in several foreign countries, than the cental, though the former would involve greater difficulties at first, 1867–1910.

*Working Classes.* See *Leicester. Retail Trade. Schools. Sheffield.*

## Y.

*Yard.* Possibility that some of the metric equivalents in the Schedule of the Act of 1878 would require to be revised if a re-comparison of the existing yard and metre were now made, *Chaney* 287.

*Yarns.* Attention drawn to the complicated table of weights now in use at Manchester for calculating the weight of yarns, the decimals of a grain going to three places, *Wollmer* 976–982. 1025 *et seq.*——No doubt that the adoption of the metric system would disturb the yarn trade; non-objection, however, to the alteration if it were universal, in view of the great advantage the metric system would be to the trade, *ib*, 983, 984. 1014–1024. 1030 *et seq.*, 1059–1072——Admission that it will be necessary to depart from the well-known English counts and make-ups if the metric system be adopted for yarns, *ib.* 1059–1072. 1101–1117.

Sundry details as to the complication, inconvenience, and injury through the present system of weights and measures in the case of the Leicester foreign yarn trade, *Rawlett* 1911 *et seq.*——Illustrations in the import of yarns from France and Germany, and in their export thereto, of the increased and complicated calculations, and the increased expense through the metrical system not being in force in this country as on the Continent, *ib.* 1914 *et seq.*

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